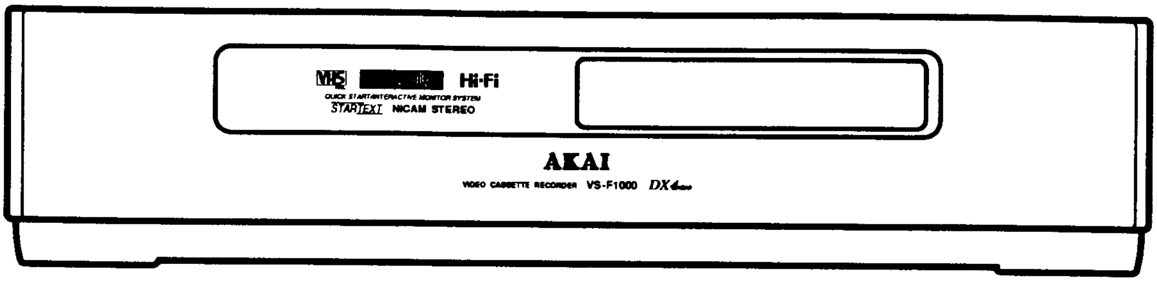
AKAI SERVICE MANUAL


VHS
Hi-Fi
QUICK START INTERACTIVE MONITOR SYSTEM
STARTEXT NICAM STEREO
AKAI
VIDEO CASSETTE RECORDER VS-F1000 DX4

HQ HIGH QUALITY VHS PAL Hi-Fi NICAM DIGITAL STEREO

MODEL VS-F1000EK-VN

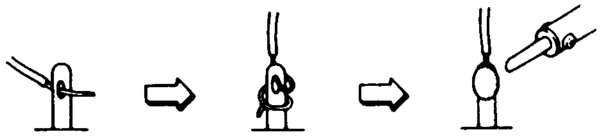
VIDEO CASSETTE RECORDER

MODEL VS-F1000EK-VN/EOG-VD
MODEL VS-F1010EOH-D/EOH-N
MODEL VS-F1030EOH-DN

★SAFETY INSTRUCTIONS

PRECAUTIONS DURING SERVICING

1. Parts identified by the ⚠ (*) symbol are critical for safety. Replace them only with the parts number specified.
2. In addition to safety, other parts and assemblies are specified for conformance with such regulations as those applying to spurious radiation.
   These must also be replaced only with the specified replacements.
   Examples: RF converters, tuner units, antenna selector switches, RF cables, noise blocking capacitors, noise blocking filters, etc.
3. Use specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially:
   1) Insulation Tape
   2) PVC tubing
   3) Spacers (insulating barriers)
   4) Insulation sheets for transistors
   5) Plastic screws for fixing micro switches
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.), wrap the ends of the wires securely around the terminals before soldering.



6. Make sure that wires do not contact heat producing parts (heat sinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. Also check areas surrounding repaired locations.
9. Make sure that foreign objects (screws, solder droplets, etc.) do not remain inside the set.

SAFETY CHECK AFTER SERVICING

After servicing, make measurements of leakage-current or resistance in order to determine that exposed parts are acceptably insulated from the supply circuit.
The leakage-current measurement should be done between accessible metal parts (such as chassis, ground terminal, microphone jacks, signal input/output connectors, etc.) and the earth ground through a resister of 1500 ohms paralleled with a 0.15 µF capacitor, under the unit's normal working conditions.
The leakage-current should be less than 0.5 mA rms AC.
The resistance measurement should be done between accessible exposed metal parts and power cord plug prongs with the power switch (if included) "ON". The resistance should be more than 2.2 M ohms.

MAKE YOUR CONTRIBUTION TO PROTECT THE ENVIRONMENT

Used batteries with the ISO symbol for recycling as well as small accumulators (rechargeable batteries), mini-batteries (cells) and starter batteries should not be thrown into the garbage can.
Please leave them at an appropriate depot. All other household batteries can be thrown out with the household waste.

★SPECIFICATIONS

Format	
EK	VHS standard
EOG/EOH	VHS standard (PAL, MESECAM)
Video recording system	Rotary, slant azimuth two-head helical scan system
Rotary heads	4 video heads & 2 audio heads & 1 flying erase head
RF input	
EK-VN	System I with monaural or multiplexed 2 channel audio (NICAM) UHF ch 21 -69
EOG-VD	System B, G (PAL, SECAM) with monaural or multiplexed 2 channel audio VHF ch 2 - 4, 5 - 12, UHF ch 21 - 69 Cable ch S1' - S3', S1 - S20
EOH-D	System B, G (PAL, SECAM) with monaural or multiplexed 2 channel audio VHF ch 2 - 4, 5 - 12, UHF ch 21 - 69 Cable ch S1' - S3', S1 - S41
EOH-DN/EOH-N	System B, G (PAL, SECAM) with monaural or multiplexed 2 channel audio (NICAM) VHF ch 2 - 4, 5 - 12, UHF ch 21 - 69 Cable ch S1' - S3', S1 - S41
RF output	
EK	System I type modulation UHF ch 30 - 39 adjustable (preset ch 36)
EOG/EOH	System G type modulation UHF ch 30 - 39 adjustable (preset ch 36)
Recording (line input)	
EK	PAL
EOG/EOH	PAL, SECAM (recorded as MESECAM)
Playback (line output)	
EK	PAL
EOG/EOH	PAL, SECAM (MESECAM Tape)

Video	
Line input level	0.5 - 2.0Vp-p / 75 ohms, unbalanced
Line output level	1.0Vp-p / 75 ohms, unbalanced
S/N ratio	More than 45dB
Horizontal resolution	More than 250 lines
Audio	(VHS Hi-Fi: 2 ch, Linear: 1 ch)
Line input level	−6dBs / 50k ohms, unbalanced
Line output level	−6dBs / 1k ohms, unbalanced
Dynamic range	More than 90dB (VHS Hi-Fi)
Frequency response	20 - 20,000Hz (VHS Hi-Fi)
Wow & Flutter	Less than 0.005% WRMS (VHS Hi-Fi)
Recording/playback time	
SP mode	240min. with E-240 cassette
LP mode	480min. with E-240 cassette
Tape speed	
SP mode	23.39mm/sec
LP mode	11.695mm/sec
Quick finder	
SP mode	approx. 5 or 13 times normal speed
LP mode	approx. 3 or 7 times normal speed
FF, REW time	approx. 4.5min. with E-180 cassette
Timer	
Program	8 programs / year and QUICK TIMER
Clock reference	Quartz crystal
Display	TV screen & FL (Tape counter, Timer etc.)
Power requirements	
EK	240V AC, 50Hz
EOG (V)	230V AC, 50Hz
EOG (Y1), EOH	220 - 230V AC, 50Hz
Power consumption	
EK-VN/EOH-D/EOH-N	44W
EOG-VD	41W
EOH-DN	47W
Operating temperature	5°C - 40°C
Dimensions	425 (W) x 99 (H) x 365 (D) mm
Weight	7.0kg

Standard accessories

Connection cord	1
Remote control unit	1
Batteries for remote control	3
Operator's manual	1

0 dBs = 0.775V

∗ For improvement purposes, specifications and design are subject to change without notice.

★INFORMATION

SYMBOLS OF MODEL NAMES FOR PRIMARY DESTINATION

The symbols below indicate the destination of each unit.

Symbol	Power Classification	Principal Destination	TV System	
			Color	Broadcast
EA	S	Australia	PAL	B,G
ED	E	China	PAL	D
EDG	E	East Europe	PAL	D,K
EDI	E	China, Hong Kong	PAL	D,K, I
EG	E	Spain, Northern Europe, Other	PAL	B,G
	Y7	Saudi Arabia		
EK	B	U.K	PAL	I
	Y1	Hong Kong		
EM	E	Middle East	PAL	B,G
	Y7	Saudi Arabia		
EO	E	Holland, Switzerland, Northern Europe	PAL	B,G
	V	Italy		
EOH	E	Holland, Belgium	PAL	B,G
	V	Italy		
EOG	V	Germany	PAL	B,G
ES	E	South Africa, Ireland, Hong kong	PAL	I
EV	E	South-East Asia	PAL	B,G
	U	Middle East, South -East Asia		
	Y1	New Zealand		
	Y7	Saudi Arabia		
EZ	S	New Zealand	PAL	B,G
EGN	E	Middle East	PAL,NTSC	B,G
	Y7	Saudi Arabia		
S	E	France	SECAM	L
SK	E	Latin America, Oceania, SECAM-OIRT	SECAM	K,K1
SEG	E	France, Switzerland	SECAM, PAL	L,B,G
U	A	U.S.A	NTSC	M
	C	Canada		
UM	U	Latin America	NTSC	M
J	J	Japan	NTSC	M

SAFETY LOCK SYSTEM

The play button on the VCR and remote control can be locked to prevent access by young children (this feature does not effect other functions of the VCR).
This feature can only be operated by the remote control.

To lock	: Press and hold the remote control's stop button for approx. 8 seconds. As long as the play button is locked, safety lock indicator " L" will light on the FL display and "⚷" will flash on the TV screen any time the play button is pressed.
To unlock	: Press and hold the remote control's play button for approx. 8 seconds. If a tape is loaded, the safety lock indicator will disappear from the FL display and TV screen, and playback will begin automatically.

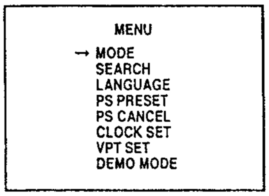
MULTI-FUNCTION MENU MODE

This is an on-screen display of the various modes you can programme via the TV screen.

MODE	: To select the AV MUTE and the tape length for remain feature when an extra long play tape is being used.
SEARCH	: To select the BLANK SEARCH and INTRO SCAN modes.
LANGUAGE	: To select a language for the on-screen displays.
PS PRESET	: To preset TV stations.
PS CANCEL	: To cancel preset TV stations.
CLOCK SET	: To set the clock.
VPT SET	: To select the station name and VPT PAGE modes
DEMO MODE	: To demonstrate some of the modes available on this VCR.

If necessary, refer to the respective sections in the operator's manual for detailed information.

1. Press the "MENU" button on the remote control unit.
   The menu list screen will be displayed on the TV screen.
   The arrow indicator is automatically set to the "MODE" position.



MENU

→ MODE
SEARCH
LANGUAGE
PS PRESET
PS CANCEL
CLOCK SET
VPT SET
DEMO MODE

2. Select the desired mode by setting the arrow indicator to the appropriate position with cursor "∨" button.
   The arrow indicator moves downwards each time the button is pressed. Pressing the cursor "∧" button will move the arrow indicator upwards.

3. Press the "OK" button.
   The selected function screen will be displayed on the TV screen.

* Press the "MENU" button again to return to the normal screen.

MANUAL TRACKING/PICTURE/STABILITY ADJUSTMENT

The VCR can be adjusted for tracking and picture sharpness anytime it is in the playback mode with the remote control unit.

- **Manual tracking control**
  Press the "<" or ">" cursor botton repeatedly until the picture is clear. During manual tracking adjustment, the tracking position is shown on the TV screen, this will disappear automatically after adjustment has been completed. Use this function when performing the A/C HEAD phase adjustment.

- **Picture sharpness control**
  Press the "∧" button repeatedly to sharpen the picture or press the "∨" button to soften the picture.

- **Stability adjustment**

1) To correct picture shake during the slow motion or still mode:
   Press "∧" or "∨" cursor button until the picture shake is corrected.
2) To correct tracking during the still mode:
   Press the "<" or ">" cursor button repeatedly until the picture is clear.

- **TEST MODE**

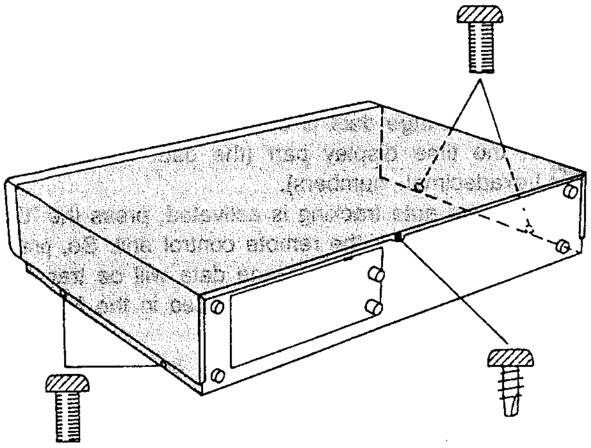
To set the VCR to the TEST MODE, press and hold both the "POWER" and "EJECT" buttons on the front panel, then plug in the AC power cord.
The TEST MODE can be cancelled by disconnecting the AC power cord or simply by pressing the "SYSTEM RESET" button.

1) MEMORIZATION OF THE REFERENCE RF ENVELOPE DETECT VOLTAGE
   For the purpose of correct operation of the I.HQ tape tuning system, memorization of the reference RF envelope detect voltage is absolutely necessary.
   When the VIDEO HEAD DRUM, PRE AMP PCB or EEP ROM in the OPERATION PCB is replaced for any reason, memorize the reference RF envelope detect voltage according to the following procedure.
   1. Set the tape speed to "SP mode".
   2. Make a recording on the TEST TAPE "TF-556AT" (AT-751822J) and rewind it to the exact point where the recording was started.
   3. Set the VCR to the "TEST MODE" then start playback.
   4. Reference RF envelope detect voltage data in the memory is displayed in the left 2 digits of the time display part of the FL display and present envelope detect voltage data is displayed in the right 2 digits of the time display part (the data is displayed in hexadecimal numbers).
   5. After the auto tracking is activated, press the "CANCEL" button on the remote control unit. So, present RF envelope detect voltage data will be transferred to the left 2 digits and memorized in the EEP ROM IC.
   6. Cancel the "TEST MODE" then set the tape speed to "LP mode" and repeat the steps 2 to 5.
2) TRACKING POSITION DISPLAY
   In the SP play mode, tracking position data can be displayed on the FL display. Data is displayed in 64 steps (in hexadecimal numbers from "00" to "3F") in the tape counter minute segments on the FL display. Pressing the "TV/VCR" button sets tracking to the maximum "3F" tracking position directly during playback and pressing the "COUNTER RESET" button sets it to the minimum "00" position.
   Pressing the PLAY button during playback sets tracking to the center position automatically.
3) SUSPENTION OF THE TAPE PROTECTION SYSTEM
   When the VCR is not in the TEST MODE, the REC PAUSE mode will be released after 30 minutes in order to protect the tape. The "STILL" mode will also be released after 5 minutes. During the TEST MODE however, the tape protection system will not operate.

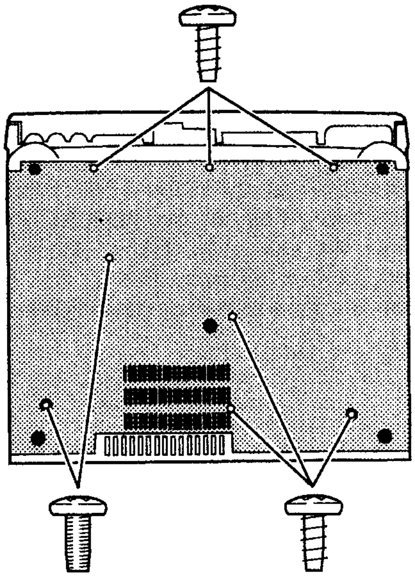
I. DISASSEMBLY

In case of trouble,etc. necessitating dismantling, please dismantle in the order shown in the illustrations.
Reassemble in the reverse order.
When reattaching the FRONT PANEL, hold the cassette loading slot door in the upright (open) position.

1. Removal of the UPPER COVER

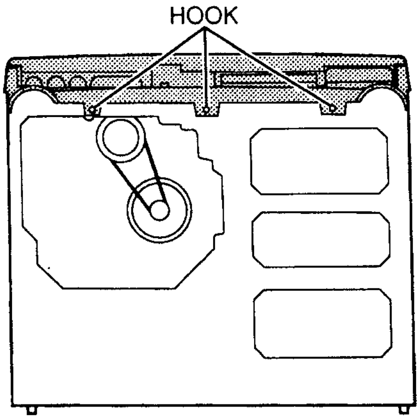


2. Removal of the BOTTOM COVER

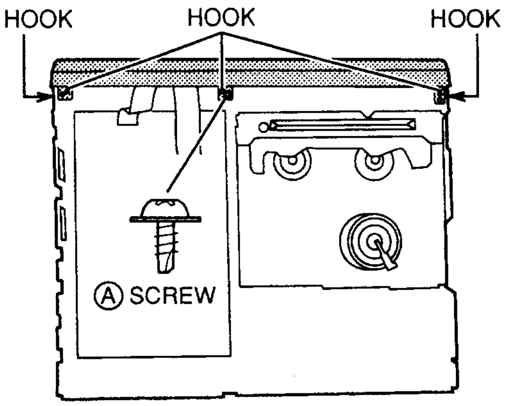


3. Removal of the FRONT PANEL BLOCK

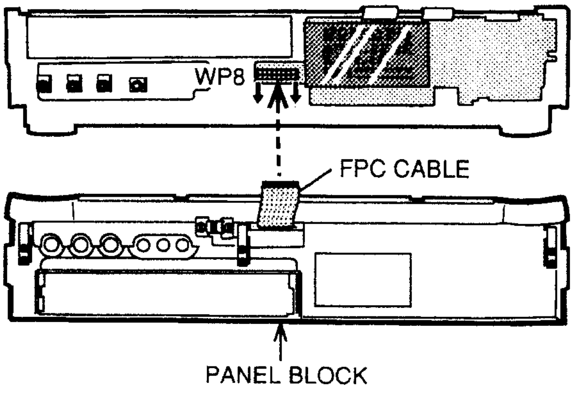
1) Release the three hooks on the bottom.



2) Remove the Ⓐ screw then release the three hooks on the top and two hooks on both side.

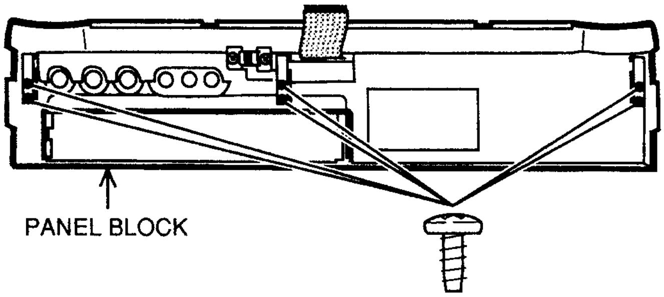


3) Unlock the stopper of the WP8 connector on the OPERATION (1) PCB and disconnect the FPC cable then remove the PANEL BLOCK.

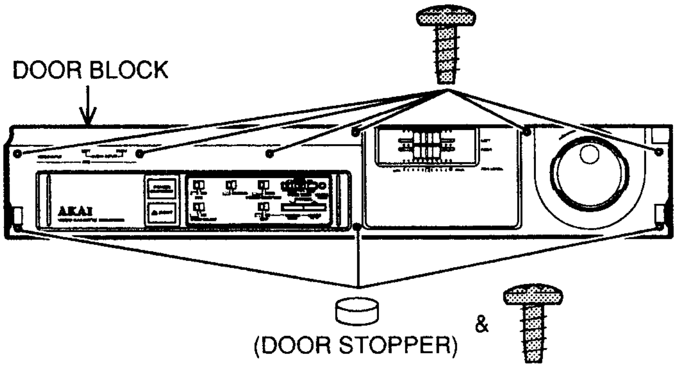


4. DISASSEMBLY OF THE DOOR BLOCK

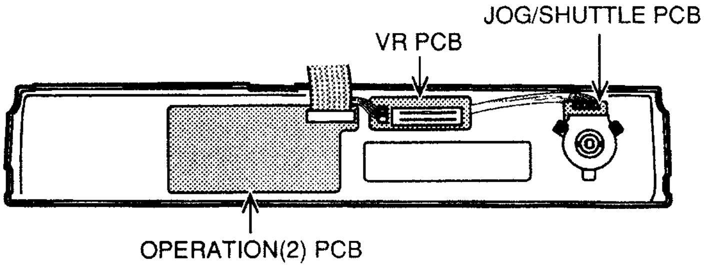
1) Remove the DOOR ANGLE retaining screws then remove the DOOR BLOCK.


PANEL BLOCK

2) Remove the JOG/SHUTTLE and REC LEVEL knobs by pulling them up carefully.
Remove the three door stoppers (rubber cushion) and then remove the nine screws.


DOOR BLOCK
AKAI
(DOOR STOPPER)
&

3) Disassemble the DOOR BLOCK according to your necessity.
Reassemble in the reverse order to assemble the DOOR BLOCK.


JOG/SHUTTLE PCB
VR PCB
OPERATION(2) PCB

II. PRINCIPAL PARTS LOCATION

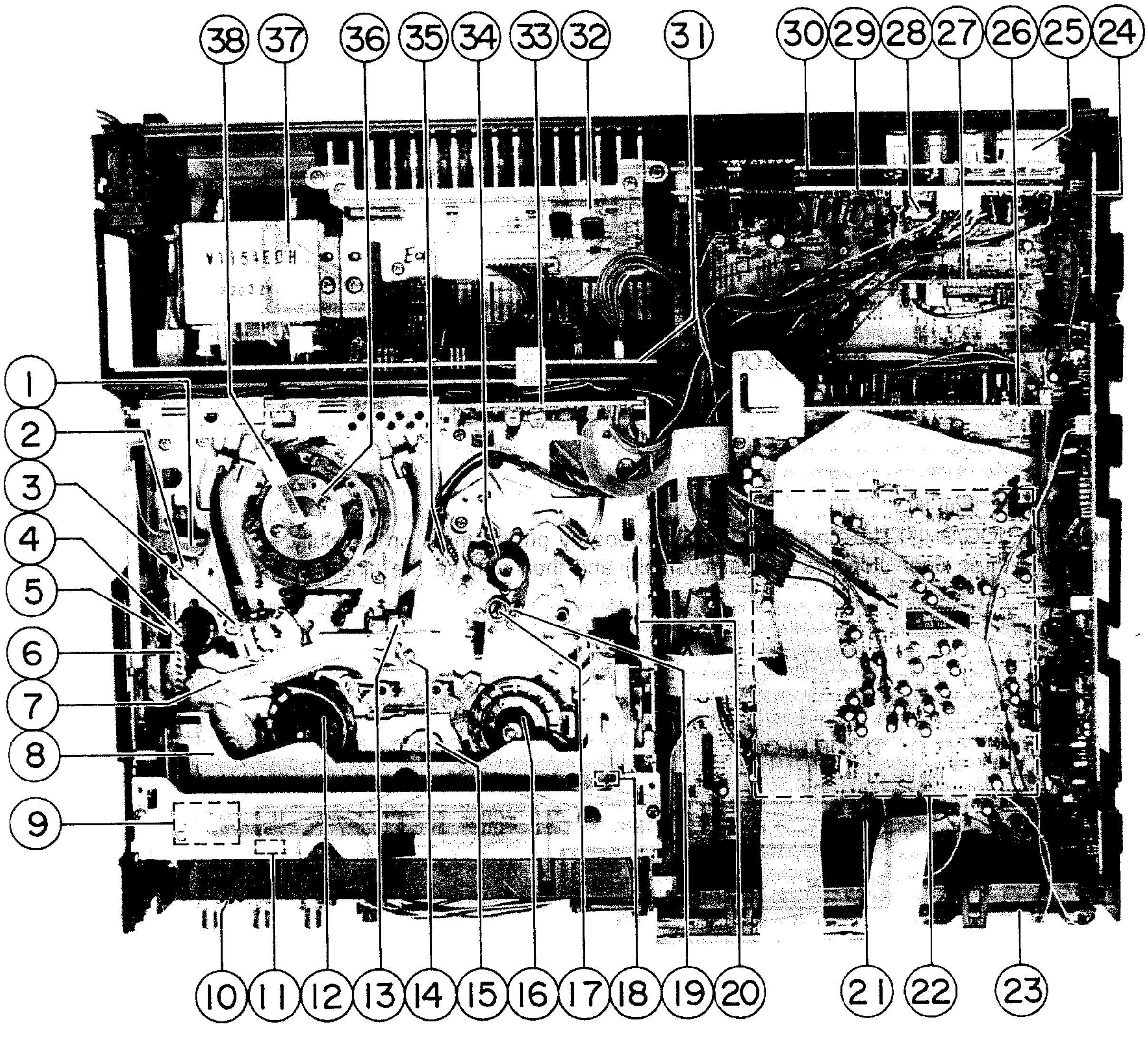


Fig. 2-1 Top view

1. FULL TRACK ERASE HEAD
2. SUPPLY TAPE GUIDE
3. SUPPLY LOADING LEADER
4. FRONT LOADING GEAR
5. SENSOR (S) PCB (END SENSOR)
6. FRONT LOADING SLIDER
7. TENSION ARM
8. CASSETTE LOAD BLK
9. LOADING MOTOR
10. FRONT PCB
11. REC SAFETY SWITCH
12. SUPPLY REEL TABLE
13. TAKE UP LOADING LEADER
14. SENSOR LED
15. IDLER (2) PART
16. TAKE UP REEL TABLE
17. CAPSTAN MOTOR
18. S-VHS TAPE DETECT SWITCH
19. REVIEW ARM
20. SENSOR (T) (START SENSOR)
21. MAIN PCB
22. CANAL PLUS (A) PCB (EOG-VD only)
    VPST/PDC PCB (EK-VN, EOG-VD only. EOH:option)
23. OPERATION (1) PCB
24. VIDEO PCB
25. RF CONVERTOR
26. D MULTI PCB (EOG-VD, EOH-D only)
    NICAM PCB (EK-VN,EOH-N only)
    NICAM PCB & DN-MULTI PCB (EOH-DN only)
27. VIF UNIT
28. TV TUNER UNIT
29. IN-OUT (B) PCB (except EOG-VD)
30. IN-OUT (A) PCB (except EOG-VD)
    CANAL PLUS (B) PCB (EOG-VD only)
31. POWER SUPPLY (1) PCB
32. POWER SUPPLY (2) PCB
33. PRE AMP PCB
34. PINCH ROLLER
35. AUDIO/CONTROL/S.ERASE HEAD
36. UPPER DRUM BLK
37. POWER TRANSFORMER
38. EARTH BRUSH

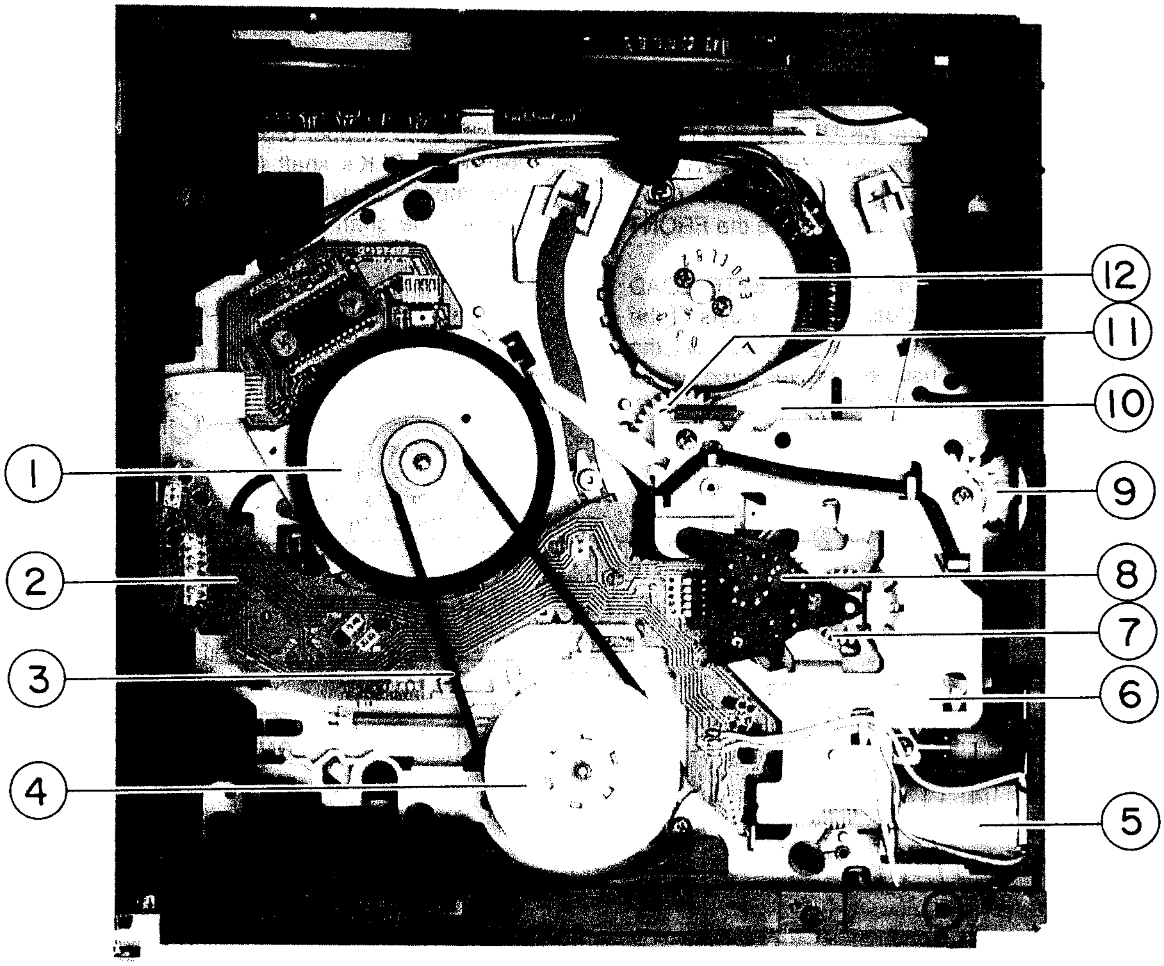


Fig. 2-2 Bottom view

1. CAPSTAN MOTOR BLOCK
2. SENSOR PCB
3. CAPSTAN BELT
4. CLUTCH DISK PART
5. LOADING MOTOR
6. LOADING DRIVE BLOCK
7. CAM SLIDER GEAR
8. MODE SELECT SWITCH
9. FRONT LOADING GEAR
10. TOGGLE (S) GEAR BLOCK
11. TOGGLE (T) GEAR BLOCK
12. DRUM MOTOR BLOCK

III. MAIN COMPONENTS REPLACEMENT

3-1.REMOVAL OF THE EJECTOR BLOCK

Set the loading mechanism to the "EJECT" position by pressing the EJECT button. Then disconnect the AC power plug from the AC socket before proceeding.

3-1-1. Removal of the CASSETTE LOAD BLK

1) Remove the two Ⓐ screws on the UPPER PLATE, as shown in Fig. 3-1 then remove the UPPER PLATE.
2) Lift up the FRONT GUIDE while pushing the CASSETTE LOAD BLK backwardS, then remove the FRONT GUIDE.
3) Gently lift up the front side of the CASSETTE LOAD BLK, then remove it. To avoid damaging the pins of the CASSETTE LOAD BLK and the groove of the MECHA.FRAME, do not use excessive force when removing the CASSETTE LOAD BLK.

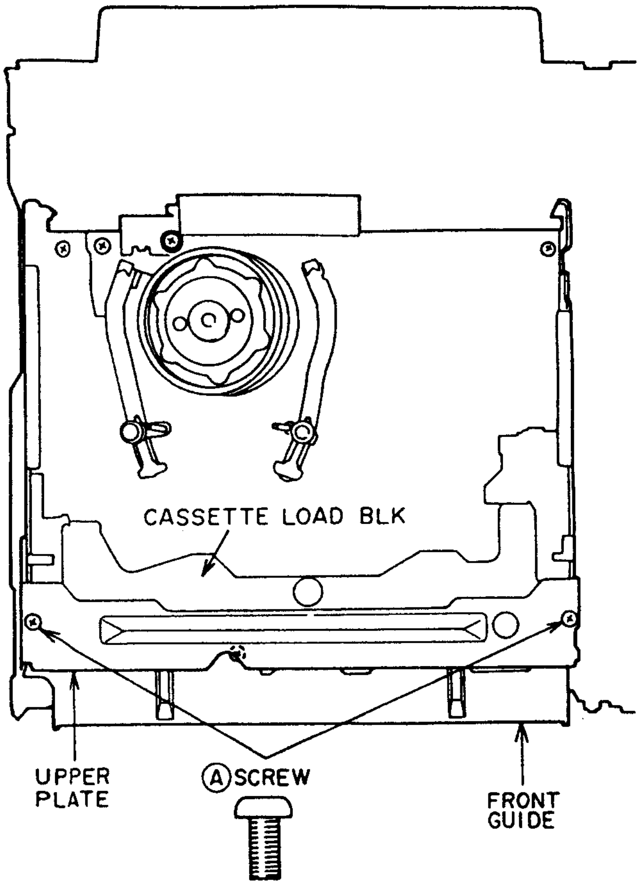


Fig. 3-1

3-1-2. Removal of the LOADING ARM BLK

1) Release the stopper on the right side end of the LOADING ARM BLK's shaft (Refer to Fig. 3-2) by pressing the stopper tab with a flat head (—) screwdriver. Then remove the shaft's right end from the bracket.

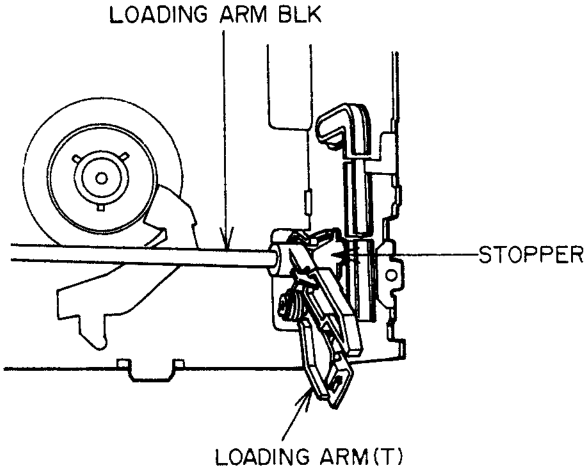


Fig. 3-2

2) Hold the LOADING ARM (T) and turn it 30 degrees clockwise, then pull out the shaft's left end from the bracket. Take special care when removing it to avoid damaging the JOINT and EJECT GEARs. (Refer Fig. 3-3)

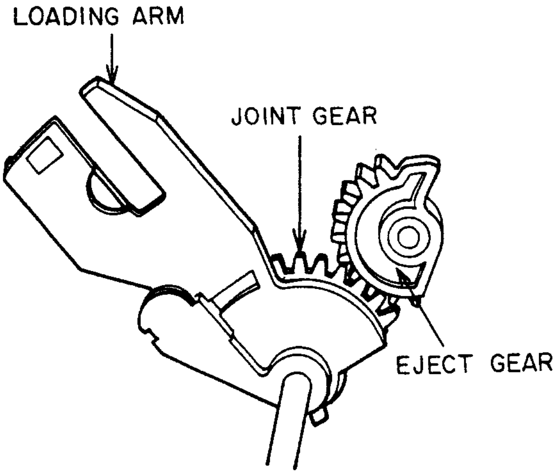


Fig. 3-3

3-2.REMOVAL OF THE SENSOR PC BOARD

* Before proceeding with removal of the SENSOR PCB, the loading mechanism must be set to the "unloaded" position (the position where the CAM SLIDER GEAR's groove mark is visible through the hole of the MODE SELECT SW.) as shown in Fig. 3-4.

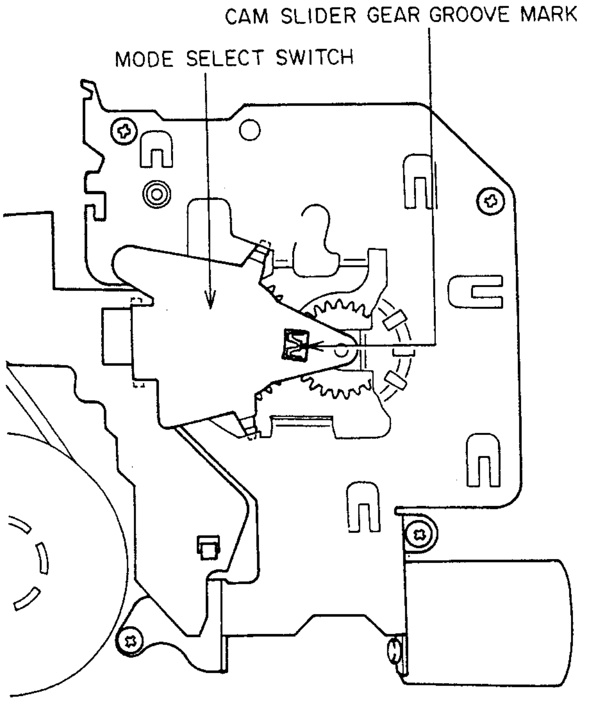


Fig. 3-4

To set the loading mechanism to the "unloaded" position, proceed with one of the following procedures.

1) Insert a video cassette tape which you no longer need. Once the tape has been loaded or has entered the "play" mode, press the POWER button to turn the power off. Disconnect the AC power plug from the AC socket after the cassette tape has been unloaded.
2) Remove the UPPER PLATE, FRONT GUIDE and CASSETTE LOAD BLK. (Refer to 3-1-1. Removal of the CASSETTE LOAD BLK.)
   Plug in the AC power cord. The LOADING ARM BLK will move backward and forward continuously. With your fingers, cover and hold both the SENSOR (S) and SENSOR (T) at the same time when the LOADING ARM BLK is in the backward position. The unit will enter the "play" mode without a cassette tape. Then release your fingers from both the sensors at the same time. After about 10 seconds (when the PINCH ROLLER is disengaged from the CAPSTAN and the SUPPLY REEL stops rotating, and the mechanism is set to "standby"), press the POWER button on the remote control unit.
   The mechanism will now be set to the "tape unloaded" position.
   Disconnect the AC power plug from the AC power socket.

3-2-1. Removal of the MODE SELECT SWITCH

1) Release the two Ⓐ stoppers as shown in Fig. 3-5.

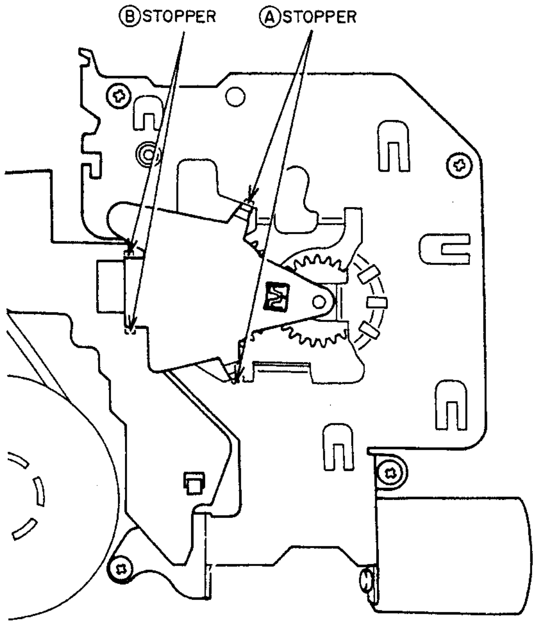


Fig. 3-5

2) Release the two Ⓑ stoppers carefully while pulling up the MODE SELECT SWITCH. Then remove the MODE SELECT SWITCH. (Do not damage the pins of the MODE SELECT SWITCH or the P1 connector on the SENSOR PCB).

3-2-2. Removal of the SENSOR PC Board

1) Disconnect the connector P403 on the MAIN PCB.
2) Remove the capstan belt.
3) Release the Ⓐ, Ⓑ and Ⓒ stoppers as shown in Fig. 3-6. Then remove the SENSOR PCB.

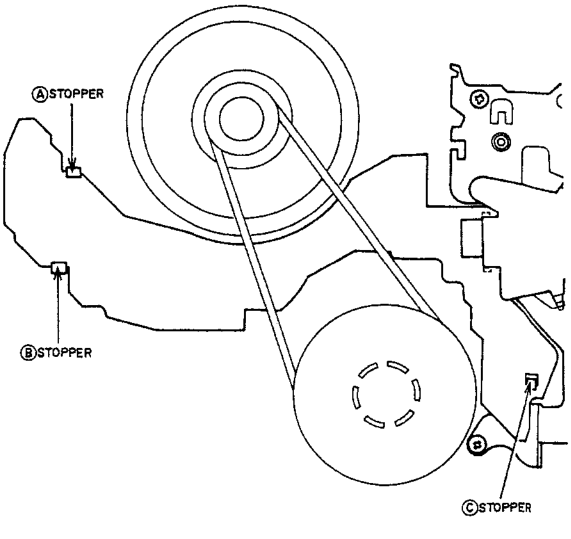


Fig. 3-6

3-3.REMOVAL OF THE LOADING DRIVE BLK

Set the loading mechanism to the "unloaded" position as well as 3-2 (REMOVAL OF THE SENSOR PC BOARD). However, this time, to avoid damaging the tape and mechanical parts, refer to 3-2, ∗ 2) only.

1) Remove the MODE SELECT SWITCH (refer to 3-2-1 Removal of the MODE SELECT SWITCH).
2) Unhook the five wires from each tab. Two wires from the SENSOR (S), two wires from the LOADING MOTOR and one wire from the REC SAFETY SWITCH.
3) Remove the Ⓐ, Ⓑ, Ⓒ and Ⓓ screws, then remove the LOADING DRIVE BLK as shown in Fig. 3-7.

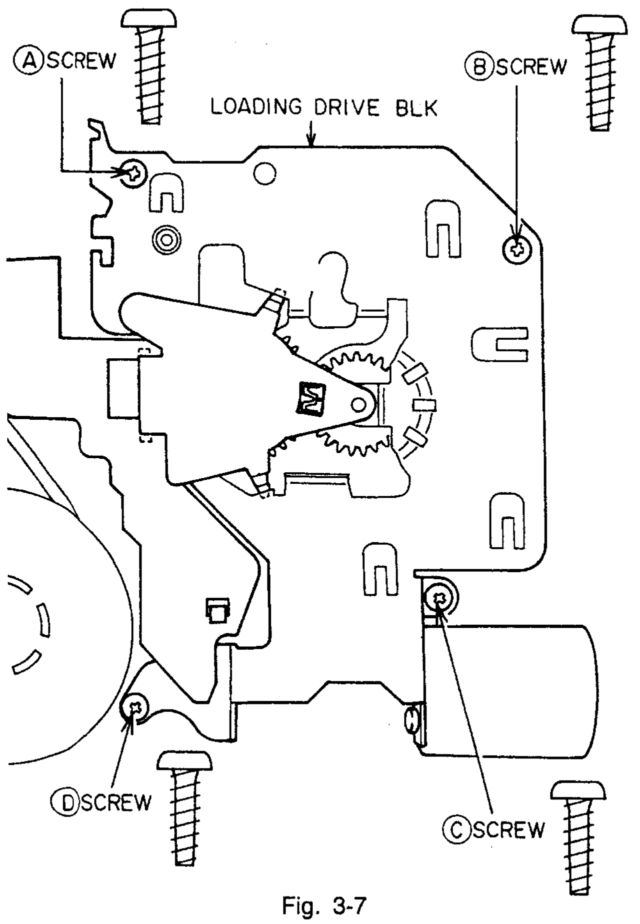

ⒶSCREW
ⒷSCREW
LOADING DRIVE BLK
ⒹSCREW
ⒸSCREW

Fig. 3-7

3-4.REASSEMBLY OF THE LOADING MECHANISM BLK

3-4-1. Position of the TOGGLE GEARs (T) and (S)

1) Set the TOGGLE GEARs (T) and (S) to the unloaded position with your fingers. Align the Ⓐ mark on TOGGLE GEAR (S) with the Ⓐ hole of TOGGLE GEAR (T) as shown in Fig. 3-8.

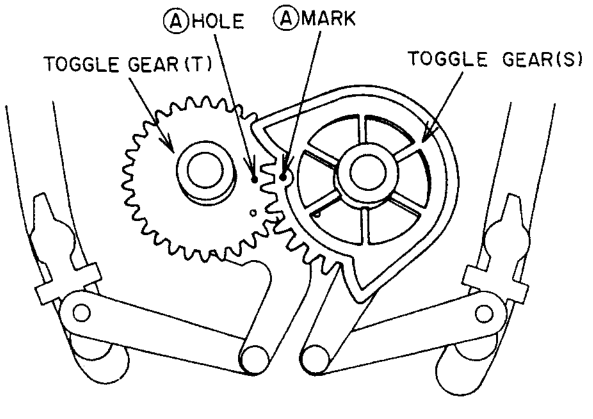

ⒶHOLE
ⒶMARK
TOGGLE GEAR (T)
TOGGLE GEAR(S)

Fig. 3-8

3-4-2. Installation of the CAM SLIDER GEAR & FRONT LOADING GEAR

1) Attach the WORM WHEEL GEAR as shown in Fig. 3-9.

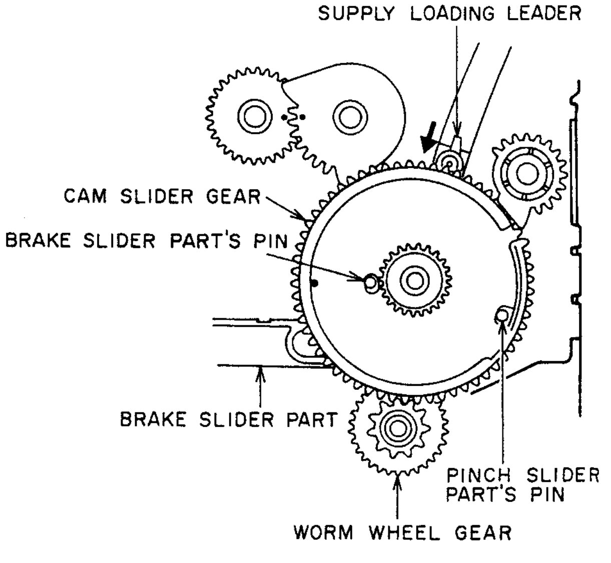

SUPPLY LOADING LEADER
CAM SLIDER GEAR
BRAKE SLIDER PART'S PIN
BRAKE SLIDER PART
PINCH SLIDER PART'S PIN
WORM WHEEL GEAR

Fig. 3-9

2) Set the CAM SLIDER GEAR and adjust the position of the BRAKE SLIDER PART and PINCH SLIDER PART so that both pins appear through the holes on the CAM SLIDER GEAR as shown in Fig. 3-9. When inserting the CAM SLIDER GEAR onto its shaft, press the SUPPLY LOADING LEADER slightly in the direction of the arrow to make installation easy.

3) Attach the FRONT LOADING GEAR as shown in Fig. 3-10 and align the Ⓑ mark on the FRONT LOADING GEAR with the Ⓑ hole of the FRONT LOADING SLIDER as shown in Fig. 3-11.

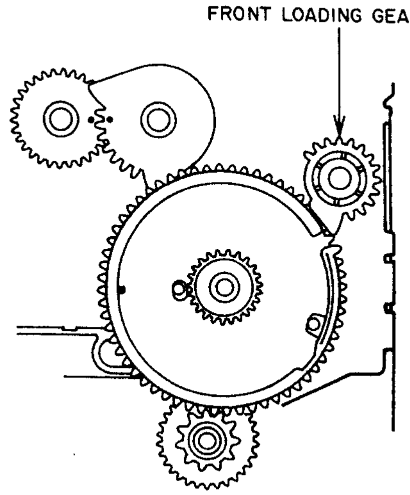

FRONT LOADING GEAR

Fig. 3-10

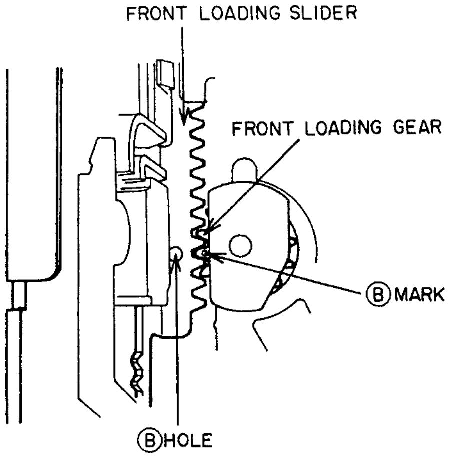

FRONT LOADING SLIDER
FRONT LOADING GEAR
ⒷMARK
ⒷHOLE

Fig. 3-11

3-4-3. Confirmation of the position of the EJECT GEAR

1) Confirm that the EJECT GEAR is in the correct position as shown in Fig. 3-12.

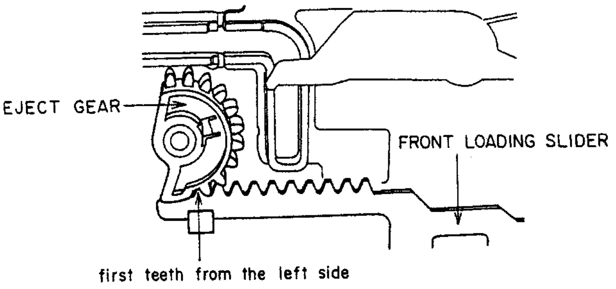

EJECT GEAR
FRONT LOADING SLIDER
first teeth from the left side

Fig. 3-12

2) Install the LOADING DRIVE BLK as shown in Fig.3-13.

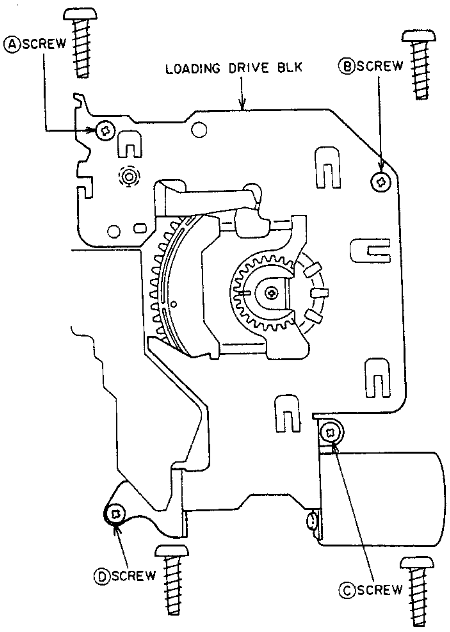

ⒶSCREW
LOADING DRIVE BLK
ⒷSCREW
ⒹSCREW
ⒸSCREW

Fig. 3-13

3-4-4. Installation of the MODE SELECT SWITCH

1) Set the MODE SELECT SWITCH's gear, so that the Ⓒ mark is in the center of the Ⓒ hole as shown in Fig. 3-14.

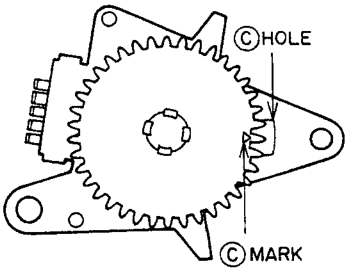


Fig. 3-14

2) Attach the MODE SELECT SWITCH to the LOADING DRIVE BLK and align the hollow of the gear's tooth (reverse side of the Ⓒ mark) with the Ⓒ groove of the CAM SLIDER GEAR as shown in Fig. 3-15.

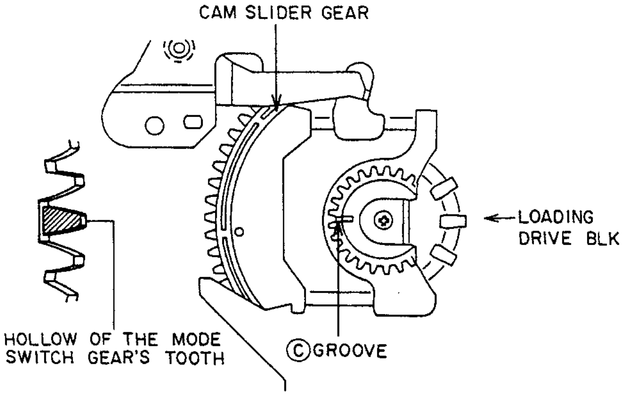

CAM SLIDER GEAR
LOADING DRIVE BLK
HOLLOW OF THE MODE SWITCH GEAR'S TOOTH
ⒸGROOVE

Fig. 3-15

3-4-5. Installation of the LOADING ARM BLK

1) While covering SENSOR (S) with your fingers, connect the AC power plug to the AC socket. The FRONT LOADING SLIDER will reach the "EJECT" position. Then disconnect the AC power plug from the AC socket before you release your fingers from SENSOR (S).
2) Install the LOADING ARM BLK in the reverse order of 3-1-2 (Removal of the LOADING ARM BLK). Position the EJECT GEAR and the JOINT GEAR as shown in Fig. 3-16.

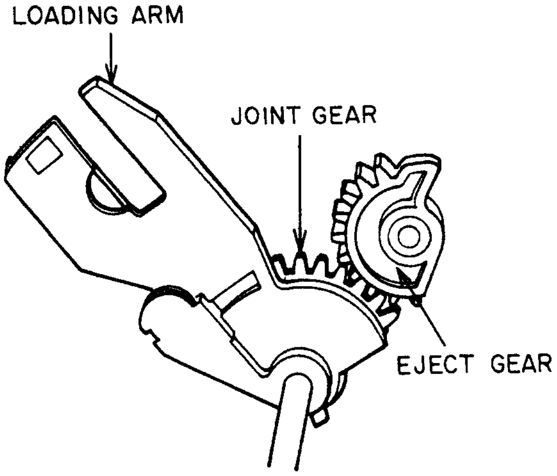


Fig. 3-16

3-4-6. Installation of the CASSETTE LOAD BLK, FRONT GUIDE and UPPER PLATE

1) Attach the CASSETTE LOAD BLK, FRONT GUIDE and UPPER PLATE in the reverse order of 3-1-1 (Removal of the CASSETTE LOAD BLK).
2) Insert a video cassette tape and confirm that the loading mechanism operates properly.

3-5.REPLACEMENT OF THE PINCH ROLLER PART

1) Remove the Ⓐ screw, then remove the PINCH ROLLER part, as shown in fig. 3-17
2) Set the pinch roller so that white plastic spacer side faces chassis when replacing. Then tighten the Ⓐ screw.

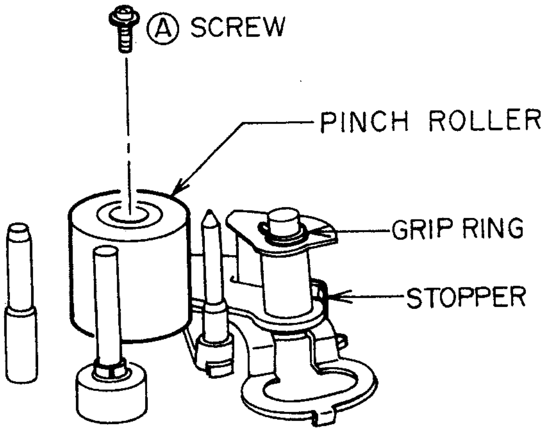


Fig. 3-17

3-6.REPLACEMENT OF THE IDLER PART (2) AND REVIEW BRAKE PART

1) Remove the CASSETTE LOAD BLOCK & LOADING ARM BLK. (refer to 3-1, REMOVAL OF THE EJECTOR BLOCK).
2) Release the stopper of IDLER PART (2) as shown in Fig. 3-18, then remove it.

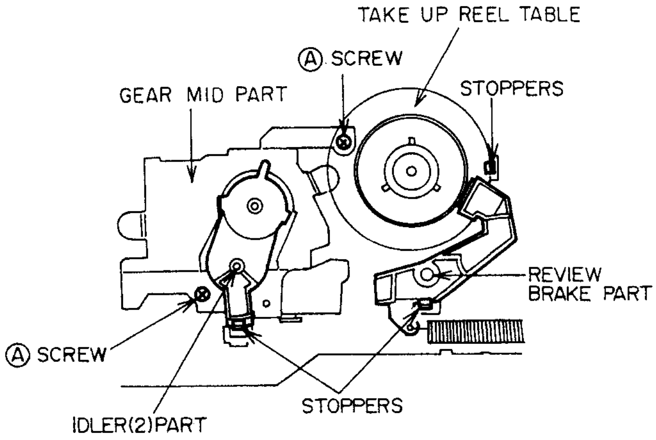


Fig. 3-18

3) Take off the review brake part spring, then release the stopper of the REVIEW BRAKE PART and remove it.
4) Reassemble the parts in the reverse order of steps 1) to 3).

3-7.REPLACEMENT OF THE GEAR MID PART

1) Remove the IDLER (2) PART and REVIEW BRAKE PART with referring to the step 3-6
2) Release the stopper of the TAKE UP REEL TABLE as shown in Fig.3-18, then remove it.
3) Remove the two Ⓐ screws then replace the GEAR MID PART as shown in Fig.3-18
4) Reassemble the parts in the reverse order.

3-8. REPLACEMENT OF THE UPPER DRUM

3-8-1. Removal of the UPPER DRUM

1) Remove the EARTH BRUSH retaining screw and remove the EARTH BRUSH.
2) Unsolder the 14 relay leads pointed by arrows shown in Fig.3-19.
3) Gently lift and remove the UPPER DRUM.

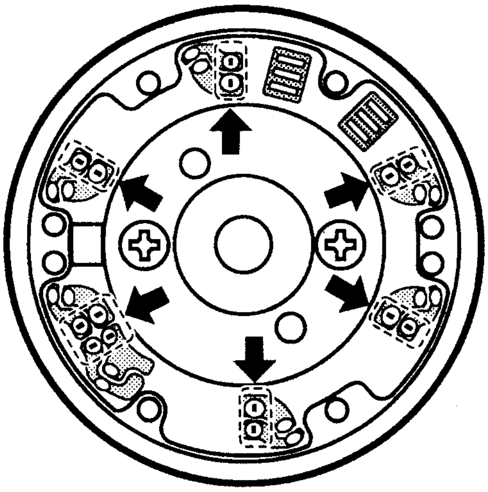


Fig. 3-19

3-8-2. Installation of the UPPER DRUM

1) Attach the UPPER DRUM to the LOWER DRUM ROTOR, so that the UPPER DRUM's white mark and LOWER DRUM ROTOR's white mark line up as shown in Fig.3-20.

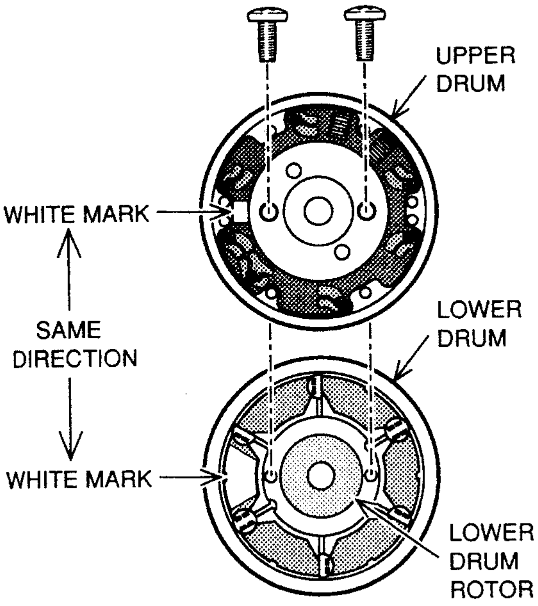


Fig. 3-20

NOTE: Because height precision is required for proper performance, and because head tips are fragile, the following points should be noted when replacing the UPPER DRUM BLOCK.

(a) Do not loosen the set screw on the collar preload.
(b) Before fixing, use alcohol to clean both surfaces where the upper drum and the rotary transformer meet.
(c) If the UPPER DRUM can not be inserted on to the shaft easily during installation, clean the hole in the UPPER DRUM with alcohol and put a little oil on the shaft.
(d) Make sure that the upper drum fixing screw holes, on the rotary transformer part, and the upper drum fixing screw penetration holes match exactly before inserting the fixing screws.
(e) Tighten the two upper drum fixing screws alternately and gradually.

3-8-3. After replacement

After replacement, the following adjustments are necessary for the proper performance.

1) Control head phase adjustment (IV. MECHANICAL ADJUSTMENT 4-3-3.)
2) PB switching point adjustment (V. ELECTRICAL ADJUSTMENT step 1)
3) Video head REC current adjustment (V. ELECTRICAL ADJUSTMENT step 5)
4) Hi-Fi head REC current adjustment (V. ELECTRICAL ADJUSTMENT step 13)
5) Reference RF envelope detect voltage preset (Refer to "TEST MODE", step 1)

3-9.DRUM MOTOR PC BOARD REPLACEMENT

1) Remove the two Ⓐ screws on the ROTARY PLATE and then remove it.
Then disconnect the connector on the DRUM MOTOR PCB as shown.

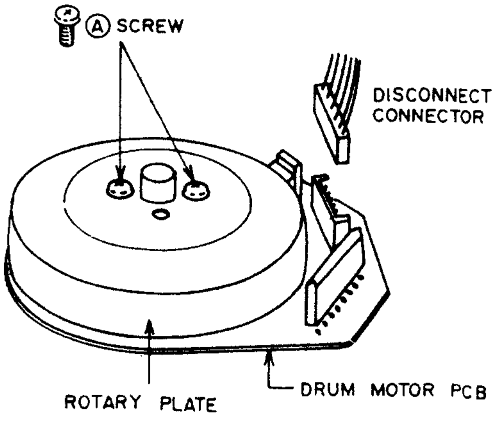


Fig. 3-21

2) Remove the three Ⓑ screws which retain the DRUM MOTOR PCB and replace it.

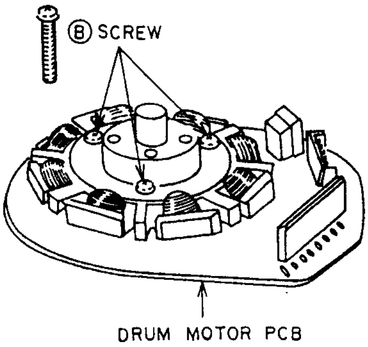

Ⓑ SCREW
DRUM MOTOR PCB

Fig. 3-22

3) Attach the ROTARY PLATE to the collar preload so that the rotary plate Ⓒ hole and collar preload Ⓓ hole line up.

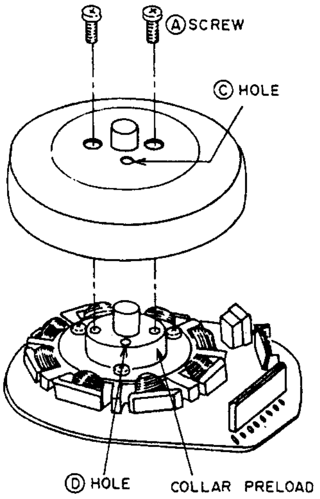

Ⓐ SCREW
Ⓒ HOLE
Ⓓ HOLE
COLLAR PRELOAD

Fig. 3-23

3-10. REMOVAL OF THE MECHANISM BLOCK

3-10-1. Removal of the PRE AMP PC Board

1) Remove the Ⓐ screw and remove the EARTH BRUSH as shown in Fig. 3-24.

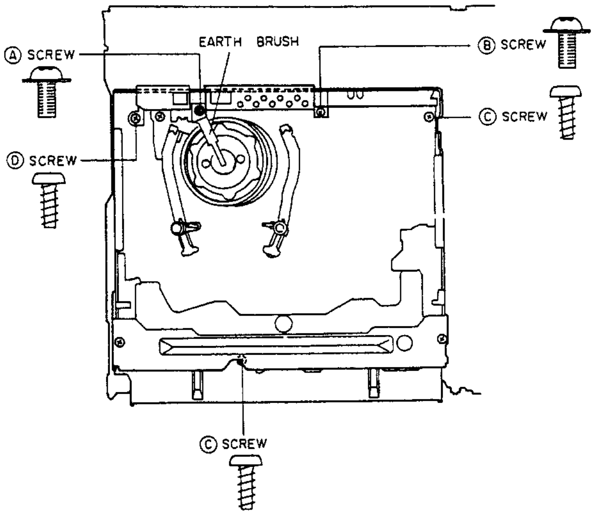

Ⓐ SCREW
EARTH BRUSH
Ⓑ SCREW
Ⓒ SCREW
Ⓓ SCREW
Ⓒ SCREW

Fig. 3-24

2) Remove the Ⓑ and Ⓓ screws then pull up the PRE AMP PCB.

3-10-2. Removal of the MECHANISM BLK (MECHA. FRAME)

1) Disconnect the P401, P402, P403 connectors on the MAIN PCB and P1 on the A/C HEAD PCB.
2) Disconnect the connector on the FULL TRACK ERASE HEAD.
3) Remove the two Ⓒ screws from the MECHA. FRAME as shown in Fig. 3-24.
4) Hold the rear side of the MECHA. FRAME then remove it by pulling it up backwards.
5) Reassemble in the reverse order for installation.

IV. MECHANICAL ADJUSTMENT

4-1. BACK TENSION ADJUSTMENT

1) Prepare a video cassette tape which you no longer needed. Remove both tape reels and the tape protection cover from the cassette tape. Then cover the video cassette's left and right side detection holes with black adhesive tape.
2) Play back the tapeless cassette which you prepared.
3) Confirm the distance between Ⓐ groove on the TENSION ARM and the Ⓐ mark on the MECHA. CHASSIS so that the distance should be within the value shown in Fig. 4-1
4) If the result is not satisfactory, eject the tape and adjust the TENSION ADJUST repeatedly until the result is satisfactory.

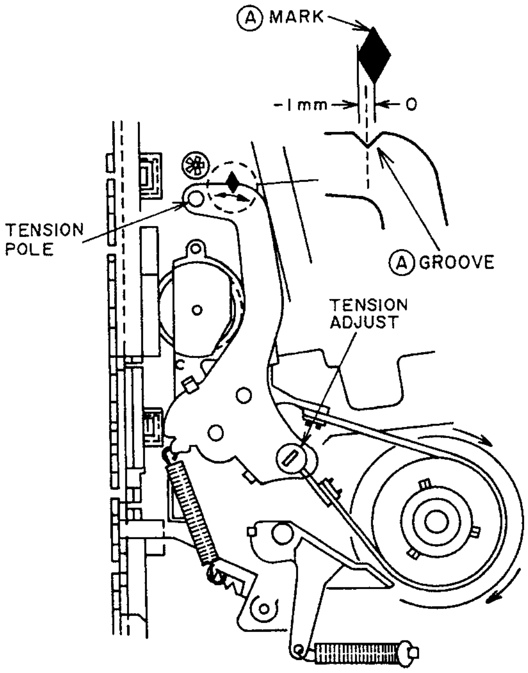


Fig. 4-1

4-2. TAPE TRANSPORT ADJUSTMENTS

NOTE: The following adjustments are required only when an irregularity is found, since these adjustment are precisely set at the factory.

4-2-1. Tape curl adjustment at the TAKE-UP TAPE GUIDE

1) Play back a recorded tape which is no longer needed.
2) Turn the Ⓐ screw on the A/C HEAD BLK, until the edge of the tape barely touches the lower part of the TAKE UP TAPE GUIDE, without any curl or wrinkle.
3) Once the Ⓐ screw is adjusted, A/C HEAD height and azimuth adjustment is required. (Refer to 4-3. A/C HEAD POSITION ADJUSTMENT.)

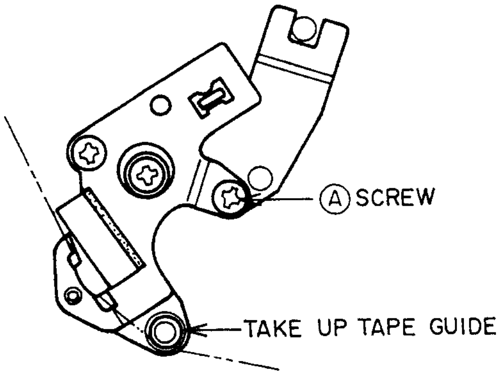
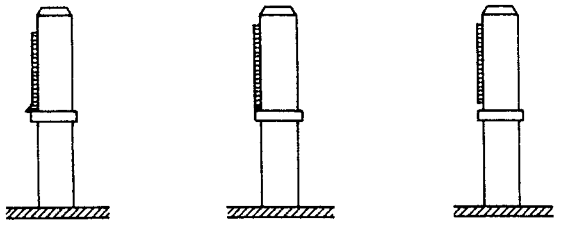


Fig. 4-2

(TAKE-UP TAPE GUIDE)

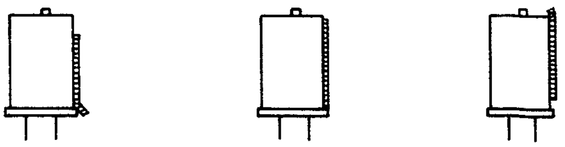


(a) INCORRECT (b) CORRECT (C) INCORRECT

Fig. 4-3

4-2-2. Confirmation of tape curl on the SUPPLY TAPE GUIDE

Confirm that the edge of the tape barely touches the lower part of the SUPPLY TAPE GUIDE, without any curl or wrinkle as shown in Fig. 4-4.



INCORRECT CORRECT INCORRECT

Fig. 4-4

4-2-3. REVIEW ARM height adjustment

1) Play back the beginning part of an E-240 tape and set the unit to the REVIEW mode by pressing the REW button. (Remove the tape protection cover to make the adjustment easier.)

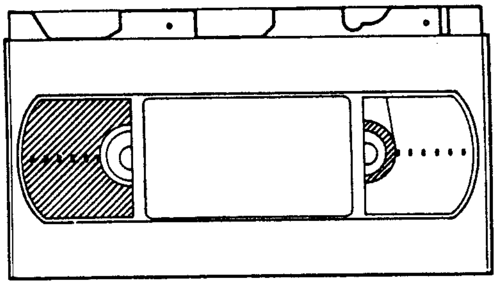


Fig. 4-5

2) Turn the REVIEW ARM height Ⓐ nut so that the edge of the tape barely touches the lower part of the TAKE-UP TAPE GUIDE, without any curl or wrinkle between the TAKE-UP TAPE GUIDE and the CAPSTAN SHAFT as shown in Fig. 4-6 to Fig. 4-8.

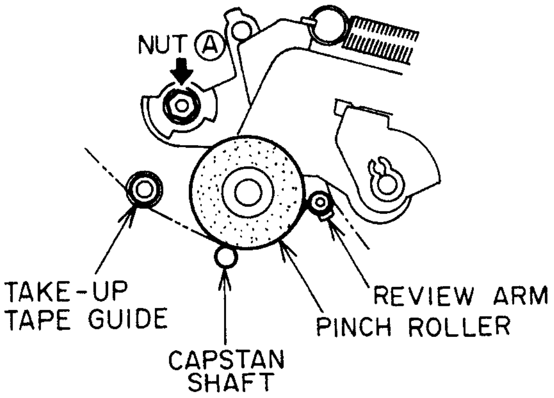
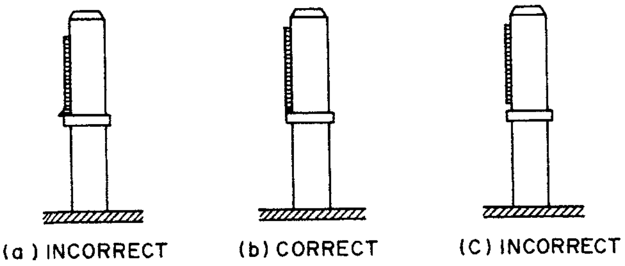


Fig. 4-6


(TAKE-UP TAPE GUIDE)

(a) INCORRECT (b) CORRECT (C) INCORRECT

Fig. 4-7

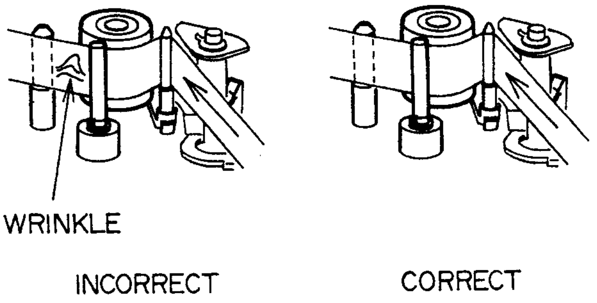


Fig. 4-8

3) Play back the beginning part of an E-240 tape and this time set the unit to the CUE mode by pressing the F.FWD button.
4) Confirm there is no curl or wrinkle near the REVIEW ARM's guide.
   If curl or wrinkle of the tape occurs, slightly turn the Ⓐ nut (Shown in Fig. 4-6) until it disappears.

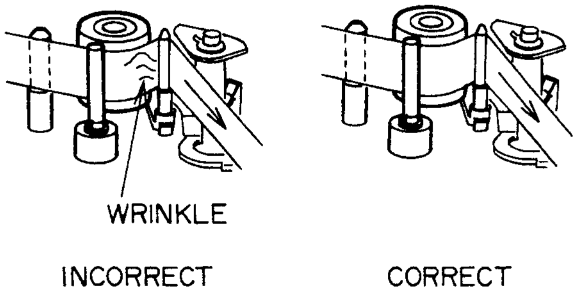
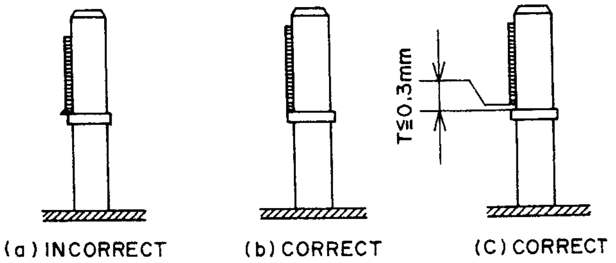


Fig. 4-9

5) Set the unit to the REVIEW mode again. Then confirm that there is no curl or wrinkle near the TAKE-UP TAPE GUIDE. (A small gap may appear after this adjustment, but this is allowable.)



(a) INCORRECT (b) CORRECT (C) CORRECT

Fig. 4-10

NOTE:
1. If the results are not satisfactory, repeat steps 2) to 5).
2. Always play an undamaged tape to obtain satisfactory adjustment.
3. Because an E-240 tape can be damaged easily, due of its thinness, a pre-adjustment with an E-180 tape is recommended.

4-2-4. LOADING LEADER height adjustments

1) Slightly loosen the set screw at the lower part of the LOADING LEADERs (L), (R) so that the LOADING LEADER can be adjusted with reasonable tightness. (Refer to Fig. 4-11.)
2) Play back the reference tape TF-530RFS (AT-751775).
3) Connect an oscilloscope's CH-1 to TR803 emitter (ENVE) on the VIDEO PCB and CH-2 to TP2 (V-SWP) on the PRE AMP PCB for triggering.
4) Turn the LOADING LEADER heads with a flat head (—) screwdriver to obtain a flat RF envelope as the ideal envelope, as shown in Fig. 4-12.
5) After adjustment is completed, tighten the loading leader set screws.

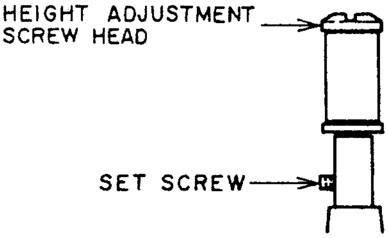
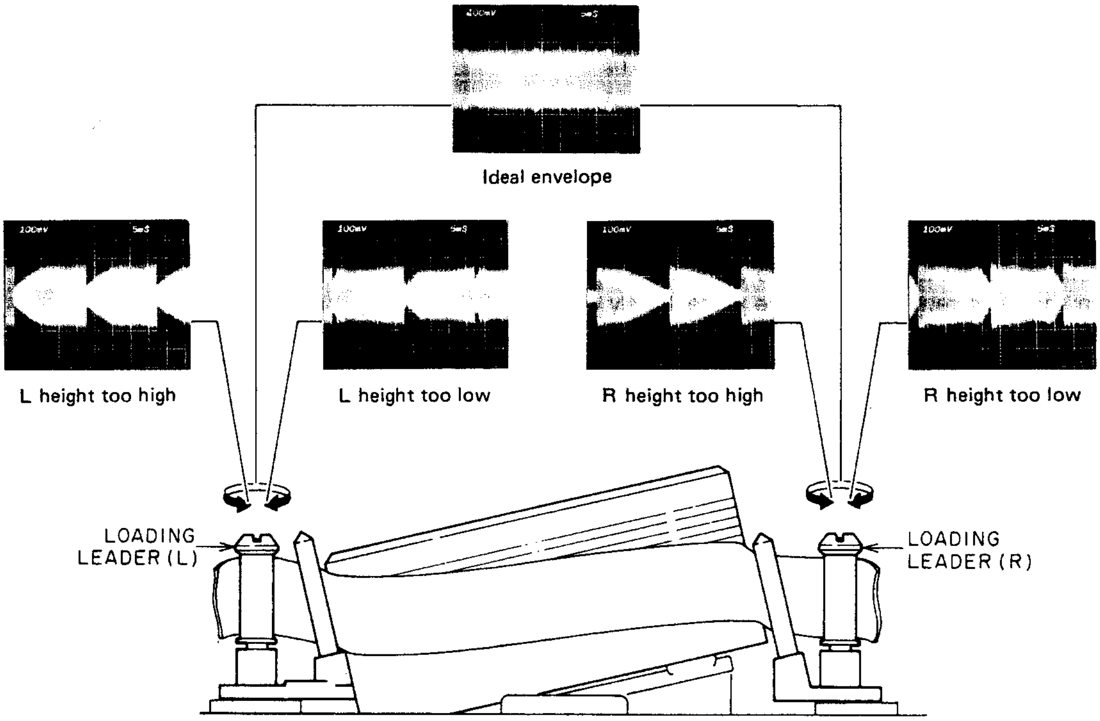

HEIGHT ADJUSTMENT SCREW HEAD
SET SCREW

Fig. 4-11


Ideal envelope

L height too high

L height too low

R height too high

R height too low
LOADING LEADER (L)
LOADING LEADER (R)

Fig. 4-12

4-3. A/C HEAD POSITION ADJUSTMENT

4-3-1. Azimuth adjustment

1) Connect an AC voltmeter or an oscilloscope to the AUDIO OUT terminal (L CH or R CH) on the rear panel.
2) Play back the reference tape TF-530RFS (AT-751775).
3) Press the "AUDIO MONITOR" button on the remote control unit and choose the "LINEAR AUDIO" playback.
4) Adjust the Ⓑ screw to obtain the maximum audio output.

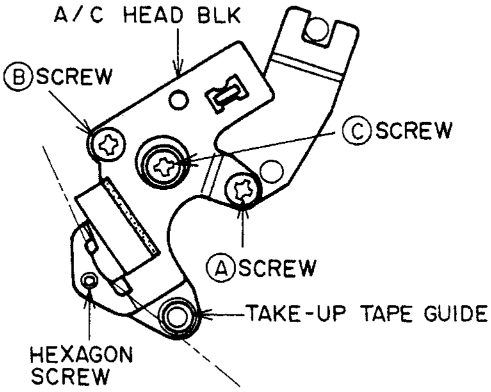
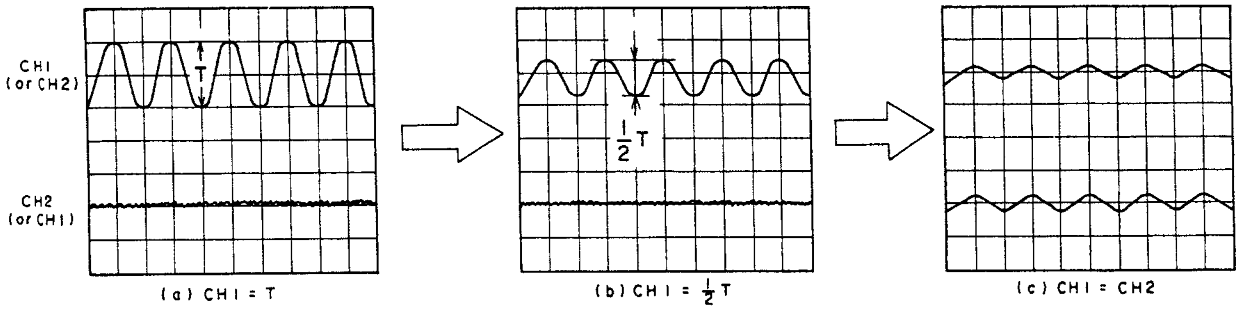

A/C HEAD BLK
ⒷSCREW
ⒸSCREW
ⒶSCREW
TAKE-UP TAPE GUIDE
HEXAGON SCREW

Fig. 4-13



(a) CH1 = T
(b) CH1 = $\frac{1}{2}$T
(c) CH1 = CH2

Fig. 4-14

4-3-2. Height adjustment

1) Play back the test tape TF-526HH (AT-751788).
2) Connect an oscilloscope's CH-1 to the AUDIO OUT (L) terminal on the rear panel and CH-2 to TP401 (CTL OUT) on the MAIN PCB.
3) Turn the hexagon screw to obtain 1/2 of the output level of either CH-1 or CH-2, whichever has an output signal as shown in Fig. 4-14.
   Then set both of the oscilloscope's channels to 100 mV/div and finely adjust the hexagon screw until both signals of CH-1 and CH-2 are nearly the same level.
4) Slightly turn the Ⓐ screw until the tape edge barely touches the lower part of the TAKE-UP TAPE GUIDE without any curl or wrinkle as shown in Fig. 4-3.
5) Adjust the head azimuth again. (Turning the hexagon screw, or Ⓐ screw, will cause head azimuth mis-alignment. Refer to 4-3-1. Azimuth adjustment.)
6) Confirm that both signals of CH-1 and CH-2 are nearly the same level (confirm that neither of the CH-1 or CH-2 output levels exceed 100 mVp-p). If the result is not satisfactory, repeat steps 3) to 5).

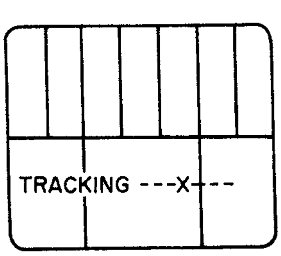


Fig. 4-15

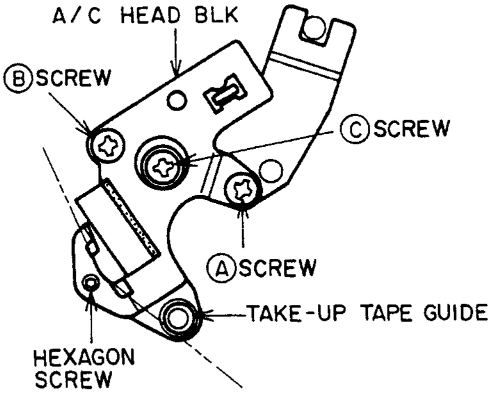


Fig. 4-16

4-3-3. Phase adjustment

1) Connect an oscilloscope's CH-1 to the TR803 emitter (ENVE) on the VIDEO PCB and CH-2 to TP2 (V-SWP) on the PRE AMP PCB for triggering.
2) Play back the reference tape TF-530RFS (AT-751775).
3) Press the "<" or ">" cursor button on the remote control until the "X" mark can be seen in the center position of the tracking range on the TV screen as shown in Fig. 4-15.
4) Loosen the Ⓒ screw slightly so that the A/C HEAD PLATE can be moved with reasonable tightness.
5) Insert a sharp, flat head (—) screwdriver into the A/C HEAD BASE and Ⓐ hole as shown in Fig. 4-17.
6) Move the A/C HEAD BASE by moving a screwdriver in the direction of the arrow as shown in Fig. 4-17 to obtain the maximum RF output, then tighten the Ⓒ screw.

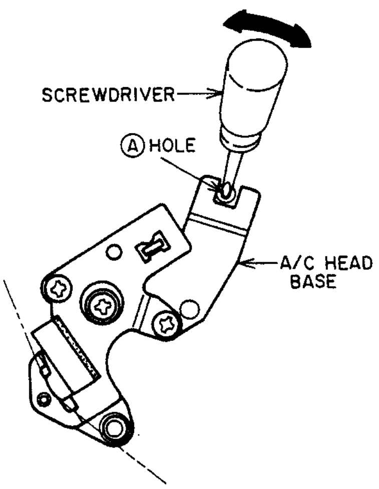


Fig. 4-17

4-2-4. LOADING LEADER height adjustments

1) Slightly loosen the set screw at the lower part of the LOADING LEADERs (L), (R) so that the LOADING LEADER can be adjusted with reasonable tightness. (Refer to Fig. 4-11.)
2) Play back the reference tape TF-530RFS (AT-751775).
3) Connect an oscilloscope's CH-1 to TR803 emitter (ENVE) on the VIDEO PCB and CH-2 to TP2 (V-SWP) on the PRE AMP PCB for triggering.
4) Turn the LOADING LEADER heads with a flat head (—) screwdriver to obtain a flat RF envelope as the ideal envelope, as shown in Fig. 4-12.
5) After adjustment is completed, tighten the loading leader set screws.

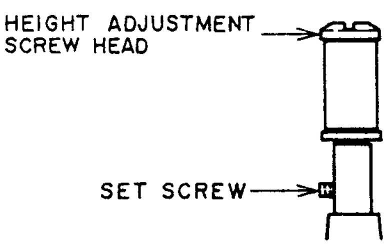

HEIGHT ADJUSTMENT SCREW HEAD
SET SCREW

Fig. 4-11

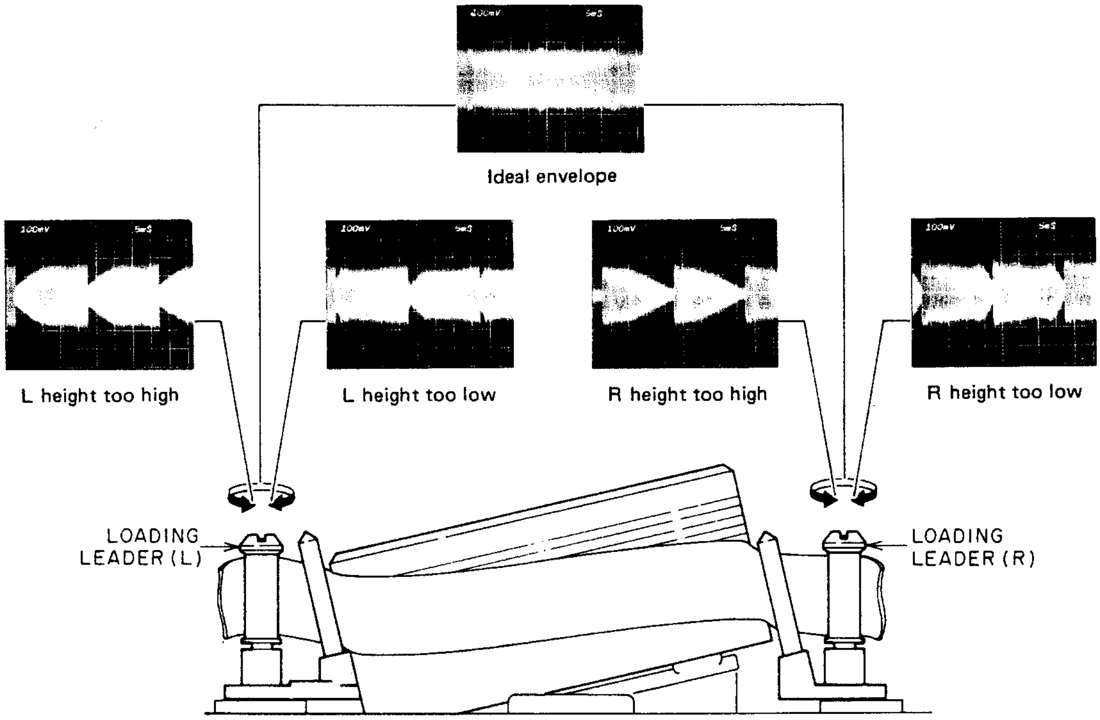

Ideal envelope
L height too high
L height too low
R height too high
R height too low
LOADING LEADER (L)
LOADING LEADER (R)

Fig. 4-12

4-3. A/C HEAD POSITION ADJUSTMENT

4-3-1. Azimuth adjustment

1) Connect an AC voltmeter or an oscilloscope to the AUDIO OUT terminal (L CH or R CH) on the rear panel.
2) Play back the reference tape TF-530RFS (AT-751775).
3) Press the "AUDIO MONITOR" button on the remote control unit and choose the "LINEAR AUDIO" playback.
4) Adjust the Ⓑ screw to obtain the maximum audio output.

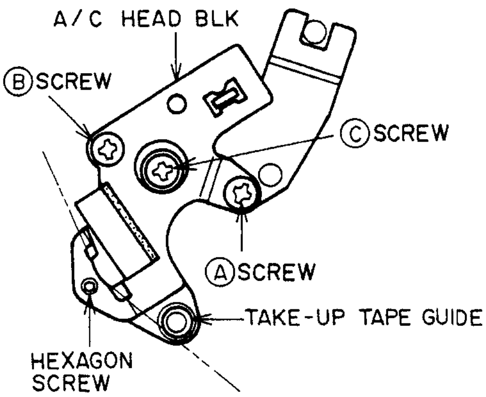
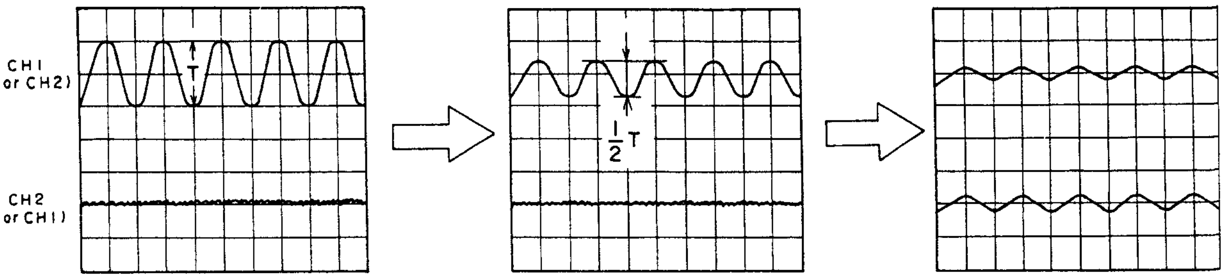

A/C HEAD BLK
ⒷSCREW
ⒸSCREW
ⒶSCREW
TAKE-UP TAPE GUIDE
HEXAGON SCREW

Fig. 4-13



(a) CH1 = T (b) CH1 = $\frac{1}{2}$T (c) CH1 = CH2

Fig. 4-14

4-3-2. Height adjustment

1) Play back the test tape TF-526HH (AT-751788).
2) Connect an oscilloscope's CH-1 to the AUDIO OUT (L) terminal on the rear panel and CH-2 to TP401 (CTL OUT) on the MAIN PCB.
3) Turn the hexagon screw to obtain 1/2 of the output level of either CH-1 or CH-2, whichever has an output signal as shown in Fig. 4-14.
   Then set both of the oscilloscope's channels to 100 mV/div and finely adjust the hexagon screw until both signals of CH-1 and CH-2 are nearly the same level.
4) Slightly turn the Ⓐ screw until the tape edge barely touches the lower part of the TAKE-UP TAPE GUIDE without any curl or wrinkle as shown in Fig. 4-3.
5) Adjust the head azimuth again. (Turning the hexagon screw, or Ⓐ screw, will cause head azimuth mis-alignment. Refer to 4-3-1. Azimuth adjustment.)
6) Confirm that both signals of CH-1 and CH-2 are nearly the same level (confirm that neither of the CH-1 or CH-2 output levels exceed 100 mVp-p). If the result is not satisfactory, repeat steps 3) to 5).

4-3-3. Phase adjustment

1) Connect an oscilloscope's CH-1 to the TR803 emitter (ENVE) on the VIDEO PCB and CH-2 to TP2 (V-SWP) on the PRE AMP PCB for triggering.
2) Play back the reference tape TF-530RFS (AT-751775).
3) Press the "<" or ">" cursor button on the remote control until the "X" mark can be seen in the center position of the tracking range on the TV screen as shown in Fig. 4-15.
4) Loosen the Ⓒ screw slightly so that the A/C HEAD PLATE can be moved with reasonable tightness.
5) Insert a sharp, flat head (━) screwdriver into the A/C HEAD BASE and Ⓐ hole as shown in Fig. 4-17.
6) Move the A/C HEAD BASE by moving a screwdriver in the direction of the arrow as shown in Fig. 4-17 to obtain the maximum RF output, then tighten the Ⓒ screw.

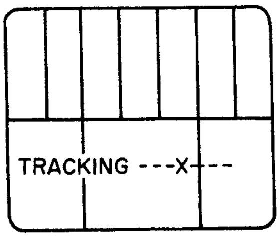


Fig. 4-15

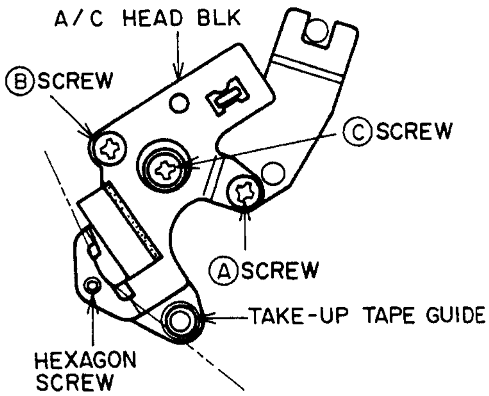


Fig. 4-16

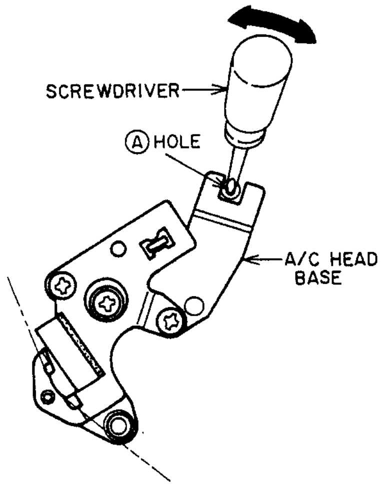


Fig. 4-17

4-2-4. LOADING LEADER height adjustments

1) Slightly loosen the set screw at the lower part of the LOADING LEADERs (L), (R) so that the LOADING LEADER can be adjusted with reasonable tightness. (Refer to Fig. 4-11.)
2) Play back the reference tape TF-530RFS (AT-751775).
3) Connect an oscilloscope's CH-1 to TR803 emitter (ENVE) on the VIDEO PCB and CH-2 to TP2 (V-SWP) on the PRE AMP PCB for triggering.
4) Turn the LOADING LEADER heads with a flat head (—) screwdriver to obtain a flat RF envelope as the ideal envelope, as shown in Fig. 4-12.
5) After adjustment is completed, tighten the loading leader set screws.

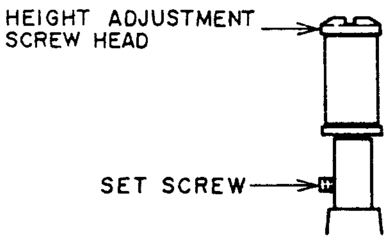

HEIGHT ADJUSTMENT SCREW HEAD
SET SCREW

Fig. 4-11

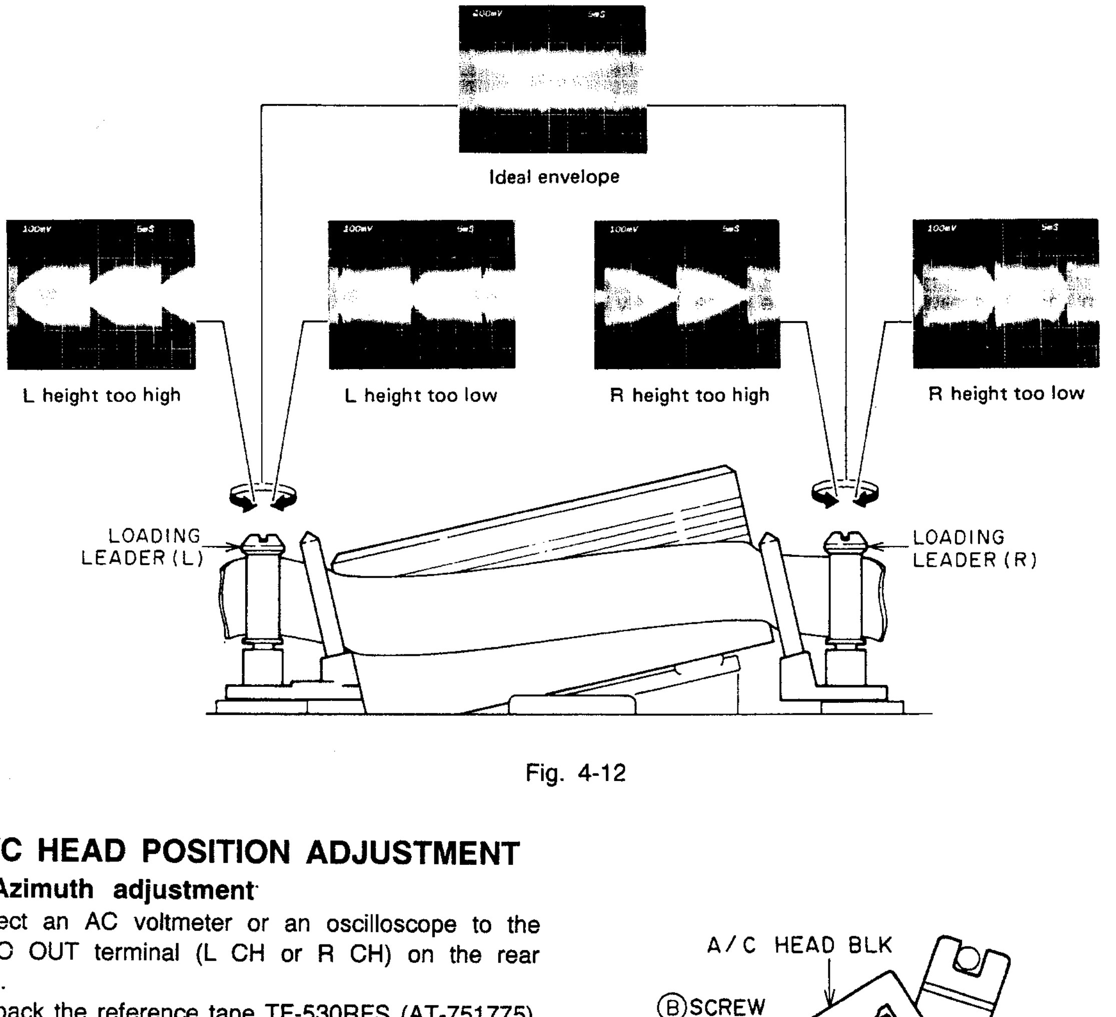

200mV
5mS
Ideal envelope
100mV
5mS
L height too high
L height too low
R height too high
R height too low
LOADING LEADER (L)
LOADING LEADER (R)

Fig. 4-12

4-3. A/C HEAD POSITION ADJUSTMENT

4-3-1. Azimuth adjustment

1) Connect an AC voltmeter or an oscilloscope to the AUDIO OUT terminal (L CH or R CH) on the rear panel.
2) Play back the reference tape TF-530RFS (AT-751775).
3) Press the "AUDIO MONITOR" button on the remote control unit and choose the "LINEAR AUDIO" playback.
4) Adjust the Ⓑ screw to obtain the maximum audio output.

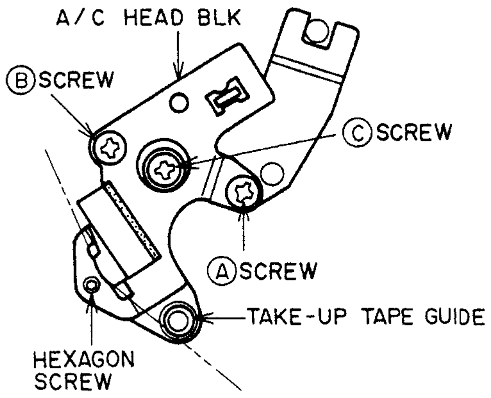
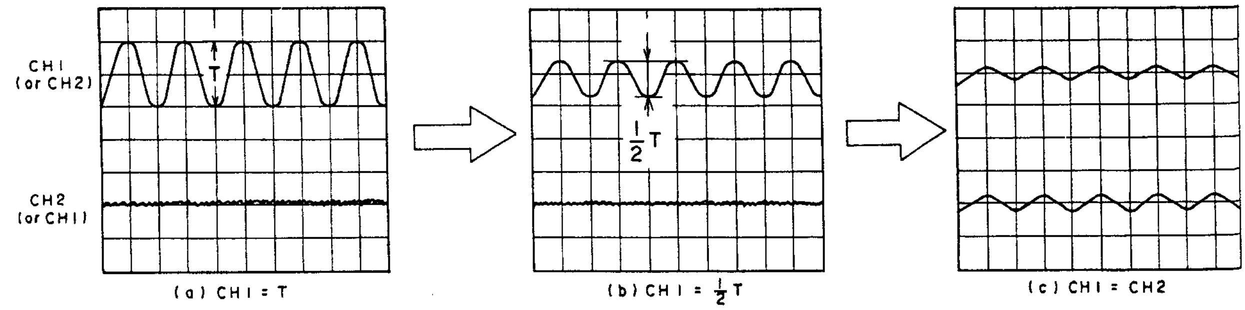

A/C HEAD BLK
ⒷSCREW
ⒸSCREW
ⒶSCREW
TAKE-UP TAPE GUIDE
HEXAGON SCREW

Fig. 4-13



(a) CH1 = T (b) CH1 = $\frac{1}{2}$T (c) CH1 = CH2

Fig. 4-14

4-3-2. Height adjustment

1) Play back the test tape TF-526HH (AT-751788).
2) Connect an oscilloscope's CH-1 to the AUDIO OUT (L) terminal on the rear panel and CH-2 to TP401 (CTL OUT) on the MAIN PCB.
3) Turn the hexagon screw to obtain 1/2 of the output level of either CH-1 or CH-2, whichever has an output signal as shown in Fig. 4-14.
   Then set both of the oscilloscope's channels to 100 mV/div and finely adjust the hexagon screw until both signals of CH-1 and CH-2 are nearly the same level.
4) Slightly turn the Ⓐ screw until the tape edge barely touches the lower part of the TAKE-UP TAPE GUIDE without any curl or wrinkle as shown in Fig. 4-3.
5) Adjust the head azimuth again. (Turning the hexagon screw, or Ⓐ screw, will cause head azimuth mis-alignment. Refer to 4-3-1. Azimuth adjustment.)
6) Confirm that both signals of CH-1 and CH-2 are nearly the same level (confirm that neither of the CH-1 or CH-2 output levels exceed 100 mVp-p). If the result is not satisfactory, repeat steps 3) to 5).

4-3-3. Phase adjustment

1) Connect an oscilloscope's CH-1 to the TR803 emitter (ENVE) on the VIDEO PCB and CH-2 to TP2 (V-SWP) on the PRE AMP PCB for triggering.
2) Play back the reference tape TF-530RFS (AT-751775).
3) Press the "<" or ">" cursor button on the remote control until the "X" mark can be seen in the center position of the tracking range on the TV screen as shown in Fig. 4-15.
4) Loosen the Ⓒ screw slightly so that the A/C HEAD PLATE can be moved with reasonable tightness.
5) Insert a sharp, flat head (━) screwdriver into the A/C HEAD BASE and Ⓐ hole as shown in Fig. 4-17.
6) Move the A/C HEAD BASE by moving a screwdriver in the direction of the arrow as shown in Fig. 4-17 to obtain the maximum RF output, then tighten the Ⓒ screw.

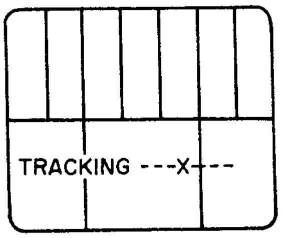


Fig. 4-15

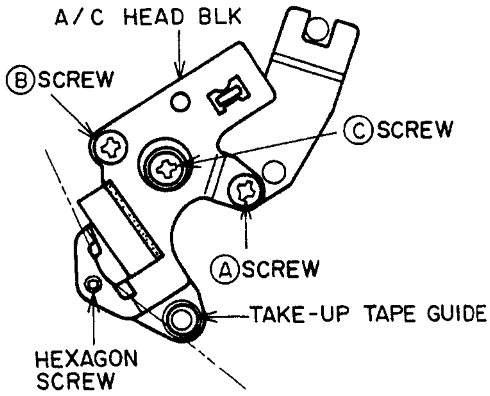


Fig. 4-16

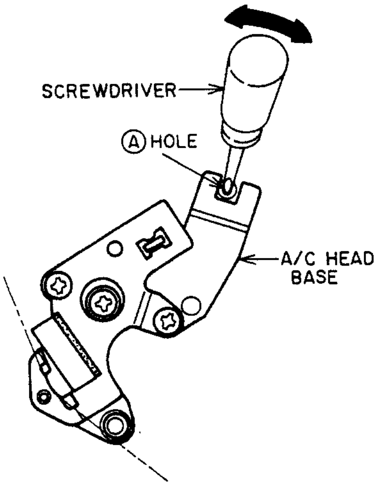


Fig. 4-17

V. ELECTRICAL ADJUSTMENT

Precautionary items prior to adjustments
1. The color bar generator output should be 1.0Vp-p.
2. The video output terminal should be terminated with 75 ohms (connect dummy load or 75 ohms input TV).
3. Never adjust the D-MULTI (DN-MULTI) PCB because it is adjusted precisely at the factory and adjustment of the D-MULTI section is required special testing equipments.

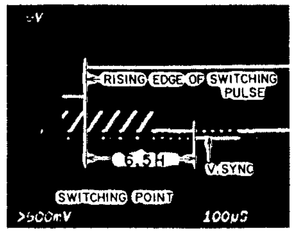
Required following test tapes.

Test tape	Parts No.
TF-530RFS	AT-751775
TF-532CBS	AT-751360

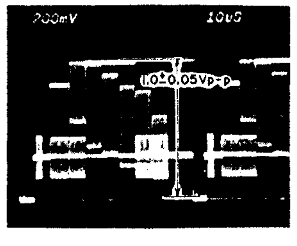
STEP | ADJUSTMENT ITEM
1. MODE and INPUT SIGNAL/TEST TAPE
2. TEST POINT and ADJ part
3. REMARKS (•) & RESULT (∗)

Test point ADJ part

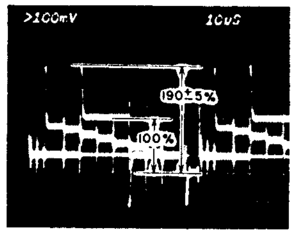
1 | PB SWITCHING POINT
1. "PB", test tape TF-530RFS
2. TP2 (V. SWP), VIDEO OUT & VR401 (SW. POINT)
3. • Connect an oscilloscope's CH-1 to the VIDEO OUT and CH-2 to the TP2 for triggering
   ∗Adjust the VR401 so that the switching point is positioned 6.5 ± 0.3 H from the V-SYNC left edge as shown.



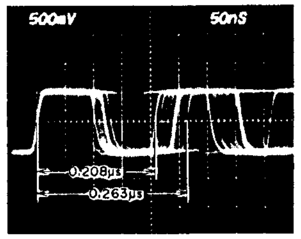
2 | VIDEO E-E LEVEL
1. "E-E" (stop mode), PAL color bar signal
2. VIDEO OUT & VR603 (E-E LEVEL)
3. • Connect an oscilloscope to the VIDEO OUT.
   ∗Adjust the VR603 so that the output level is 1.0Vp-p.

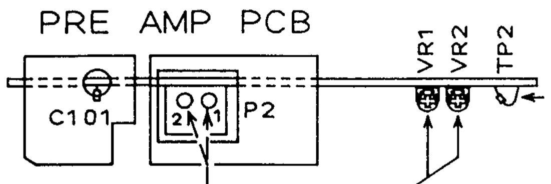


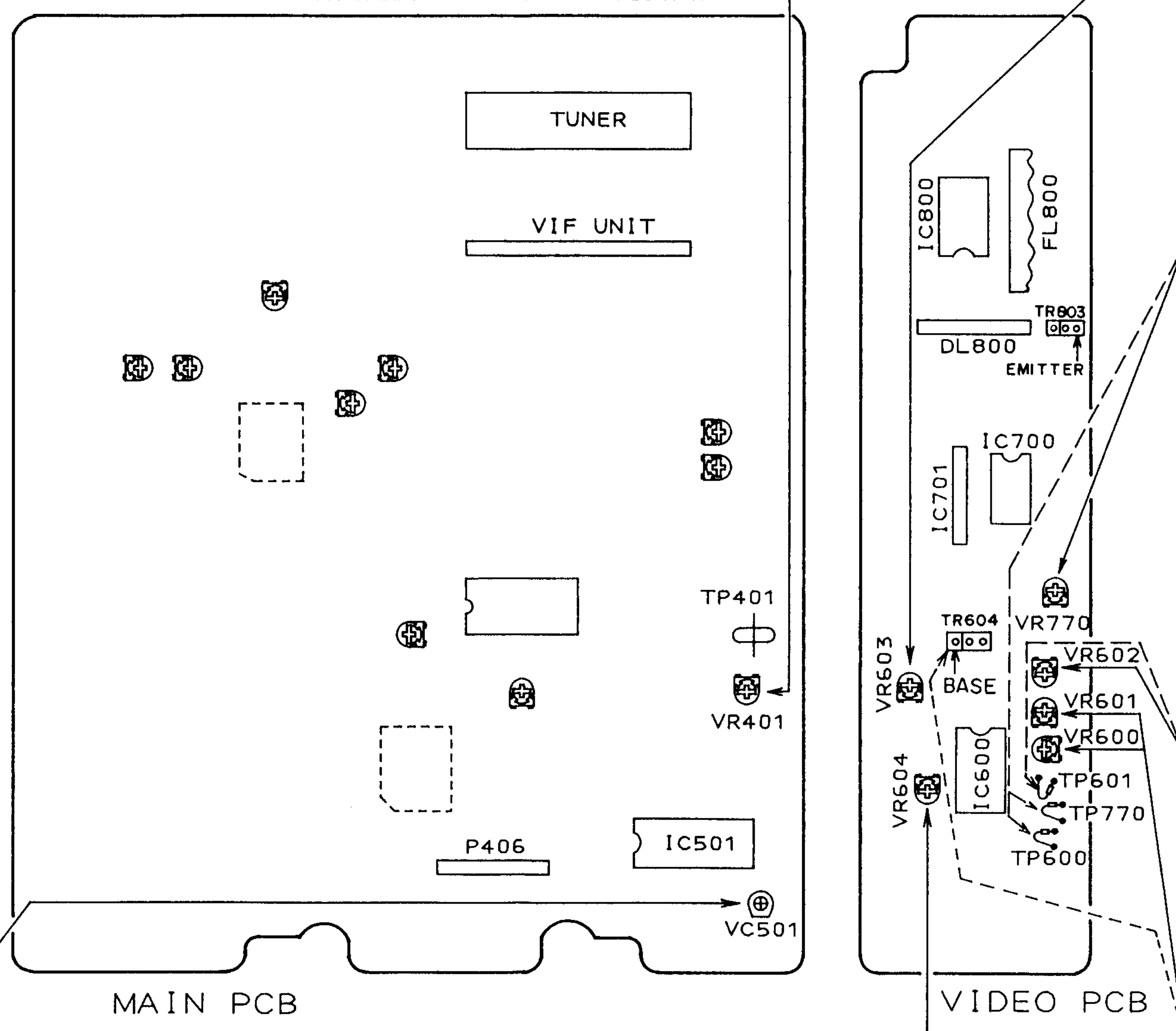
3 | WHITE CLIP
1. "E-E" (stop mode), PAL color bar signal
2. TP601 (W.CLIP) & VR602 (W.CLIP)
3. • Connect an oscilloscope to the TP601.
   ∗Adjust the VR602 so that white clip level becomes 190% as shown.



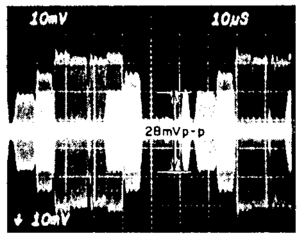
4 | FREQUENCY & DEVIATION
1. "REC", PAL color bar signal
2. TR604 base (REC Y) & VR601 (FREQ), VR600 (DEV)
3. • Connect an oscilloscope to the TR604 base on the VIDEO PCB.
   ∗Adjust the VR600 and VR601 alternately so that the waveform becomes as shown.
   Lower frequency: 0.263 μs (3.8MHz)
   Upper frequency:0.208 μs (4.8MHz)

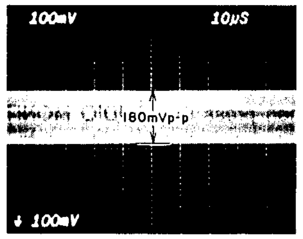




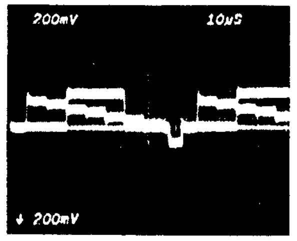


5 | VIDEO REC CURRENT
1. "REC" (LP mode), PAL color bar signal
2. P2 (TP REC. CURR) ① pin, ② pin & VR1(REC-CHROMA), VR2 (REC-Y)
3. • Connect an oscilloscope's CH-1 to P2 ① pin and CH-2 to ② pin. And set the oscilloscope's display mode to "ADD" mode and CH-2 polarity to "INVERTED".
   •Turn the VR2 (REC-Y) fully counterclockwise.
   ∗Adjust the VR1 so that the chroma REC current becomes 28mVp-p at the burst signal area.
   ∗Disconnect the input signal then adjust the VR2 so that the Y REC current becomes 180mVp-p.

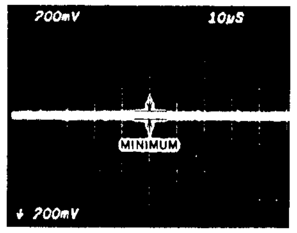




6 | CCD
1. "PB", test tape TF-532CBS
2. TP600 (CCD REF LEVEL), TP770 (CCD LEVEL) & VR770 (CCD LEVEL)
3. • Connect an oscilloscope's CH-1 to TP600 and CH-2 to TP770. And set the oscilloscope's display mode to "ADD" mode and CH-2 polarity to "INVERTED".
   ∗Adjust the VR770 so that waveform level on the oscilloscope becomes minimum.

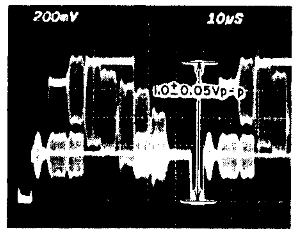


INCORRECT

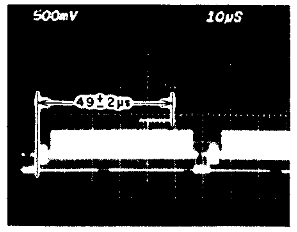


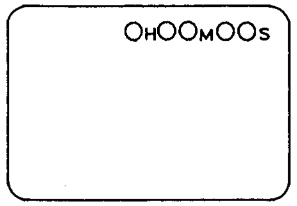
CORRECT

7 | VIDEO PB LEVEL
1. "REC" → "PB", PAL color bar signal
2. VIDEO OUT & VR604 (PB LEVEL)
3. • Connect an oscilloscope to the VIDEO OUT.
   • Make some recording on a blank tape then play it back.
   ∗ Adjust the VR604 so that the PB level becomes 1.0Vp-p



8 | CHARACTER POSITION
1. "E-E" (STOP mode), No signal input
2. VIDEO OUT, TV SCREEN & VC501
3. • Press the "DISPLAY" button on the remote control to display elapsed tape counter.
   • Connect an oscilloscope to the VIDEO OUT.
   ∗Adjust the VC501 so that right end of the IMS signal becomes 49 μs from the H-sync as shown.





ON THE SCREEN

12 Hi-Fi DEVIATION

1. "PB", test tape TF-532CBS
2. AUDIO OUT (L), (R) & VR300 (L-DEV), VR302 (R-DEV)
3. • Connect an AC milli-voltmeter to the L-CH and R-CH AUDIO OUT.

   *Adjust the VR300 and VR302 so that the output level of both L and R channel becomes -6.0dBs.

   ***Input 1kHz, -6.0dBs signal to the AUDIO IN terminal and adjust the volumes on the DOOR BLOCK so that both L-CH and R-CH output levels are -6dBs during stop mode. Set a blank tape to the VCR. Make some recording on the tape then play it back and confirm that the playback level is -6.0 ±1.0dBs.**

11 Hi-Fi CARRIER FREQUENCY

1. "E-E" (stop mode), no signal input
2. R332 (L), R331 (R) & VR301 (L-fo), VR303 (R-fo)
3. • Connect a frequency counter to the lead of the R332 (reverse side of the MAIN PCB) and ground.

   ***Adjust the VR301 so that the reading on the frequency counter becomes 1.4MHz ±10kHz.**

   • Connect the frequency counter to the lead of the R331 (reverse side of the MAIN PCB) and ground.

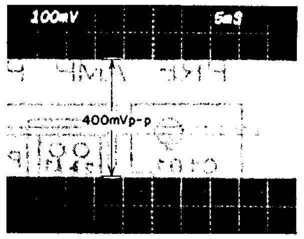
   ***Adjust the VR303 so that the reading on the frequency counter becomes 1.8MHz ±10kHz.**

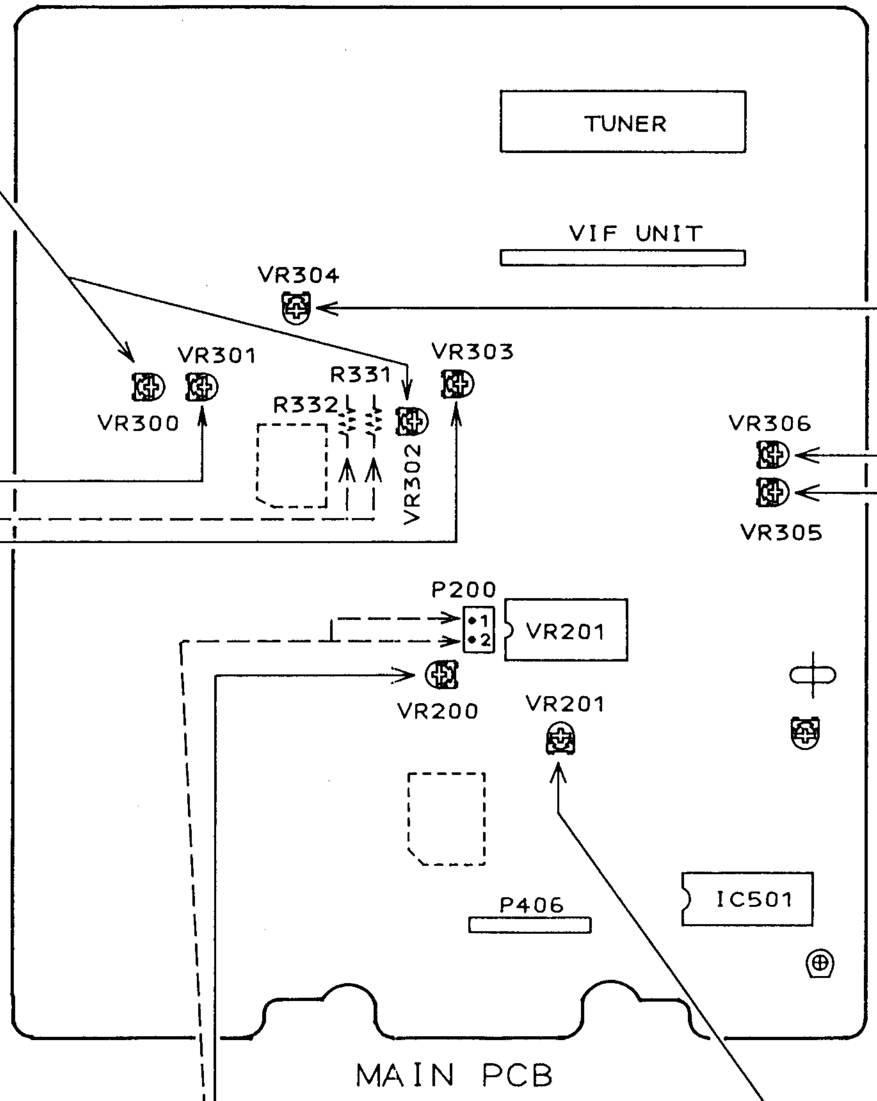
13 Hi-Fi REC CURRENT

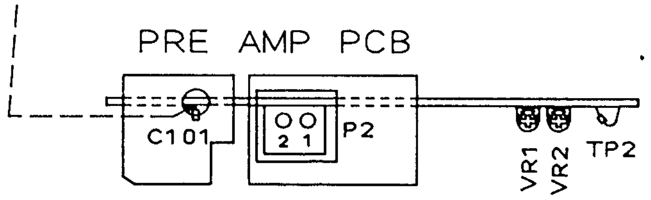
1. "REC" (LP mode), no signal input
2. C101 (A REC CURR) & VR304 (REC CURRENT)
3. • Connect an oscilloscope to the lead of the C101.

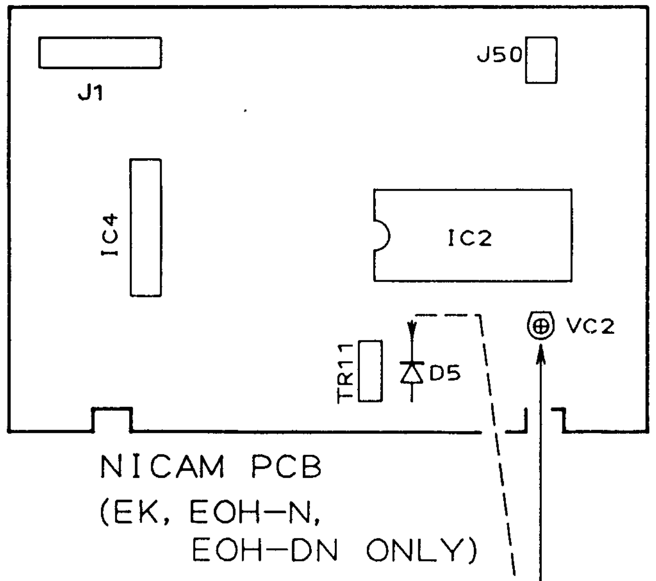
   • Set the tape speed to the "LP" mode and start recording on a blank tape.

   *Adjust the VR304 so that the waveform level on the oscilloscope becomes 400mV p-p.









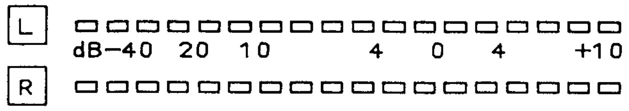
14 METER SENSITIVITY

1. "E-E", 1kHz -6dB
2. AUDIO OUT & VR305 (L-CH), VR306 (R-CH)
3. • Connect an AC milli-voltmeter to the AUDIO OUT (L-CH and R-CH).

   Adjust the volumes on the front panel's DOOR BLOCK so that both L-CH and R-CH output levels are -6.0dBs.

   • Engage the "TEST MODE" (refer to the "information" section) then press the "AUDIO MONITOR" button on the remote control unit and choose the Hi-Fi mode.

   *Adjust the VR305 and VR306 so that the numbers displayed in the tape counter's hour part (L-CH) and minute part (R-CH) in the FL DISPLAY rearch 34 to 35 (the bar meter must indicate 0 VU at this point). Then change the output level of the audio signal generator slightly and confirm that the indication of the L-CH and R-CH bar meter changes simultaneously. If the result is not satisfactly, finely adjust the VR305 or VR306 again.



15 D/A OSC

1. "E-E" (stop mode), receive NICAM broadcast station
2. TP-OSC (D5 cathode side) & VC2 (D/A OSC)
3. • Connect an oscilloscope to TP-OSC and set input mode to "DC".

   *Adjust VC2 so that average DC voltage becomes 1.5V.

9 REC BIAS

1. "REC" (LP mode), (no signal input)
2. P200 ①, ② pin & VR200 (REC BIAS)
3. • Connect an AC milli-voltmeter to the P200 ① pin and ② pin (ground side).

   (Never connect the AC milli-voltmeter's ground to the VCR's ground)

   *Adjust the VR200 so that the reading on the AC milli-voltmeter becomes 2.4mV

10 LINEAR PB LEVEL

1. "PB", test tape TF-532CBS
2. AUDIO OUT & VR201 (LINEAR PB LEVEL)
3. • Connect an AC voltmeter to the AUDIO OUT (L-CH or R-CH).

   • Press the "AUDIO MONITOR" button on the remote control unit and choose the "LINEAR AUDIO" playback.

   *Adjust the VR201 so that the output level becomes -11.0dBs.

VI. PARTS LIST

ATTENTION

1. **When placing an order for parts, be sure to list Part No., Model No. and the description of eachpart. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.**
2. **Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.**
3. **Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.**

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

Ref. No.	Part No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20×03STL CMT
4	ZS-536488	BID20×08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

This number corresponds with the individual parts index number in that figure.

b) PC Board

6. MAIN PC BOARD

Ref. No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A] :AAL (U.S.A)	[S] :SAA (Australia)
[B] :BEAB (England)	[U] :U/T (Universal Area)
[C] :CSA (Canada)	
[E] :CEE (Europe)	[V] :VDE (Germany)
[J] :JPN (Japan)	[Y] :Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No.listed at right of Part No.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉDE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ FABRICANT.

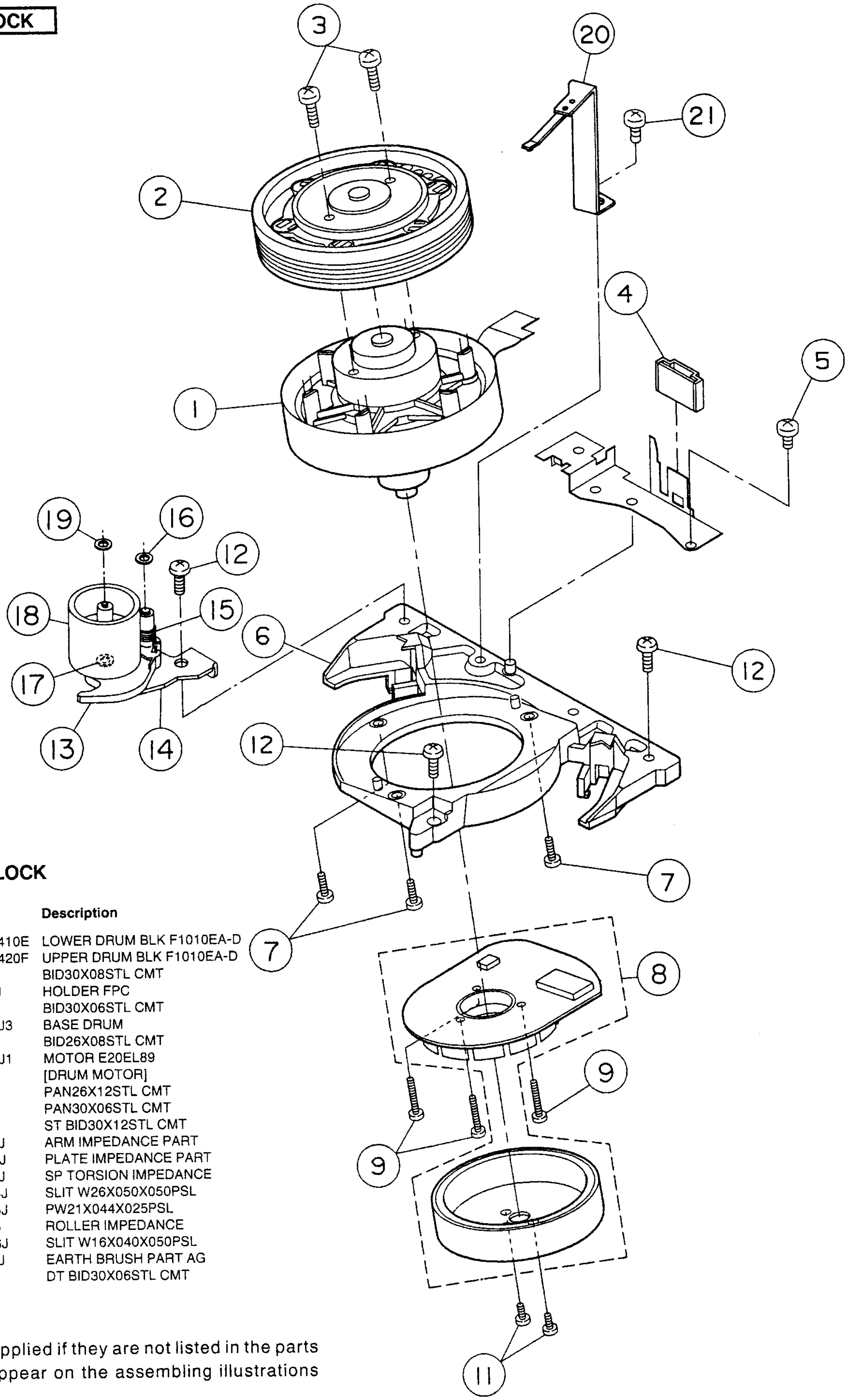
1.RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref.No.	Part No.	Description
1	AV-B1040A010G	REMOCON BLK RC-V1001E [EK]
2	AV-B1040A010H	REMOCON BLK RC-V1001G [EOG]
3	AV-B1043A010G	REMOCON BLK RC-V1002E [EOH]
4	BB-V1130A020F	MECHA DECK BLK F1010EOH-D
5	BL-V1102A140A	ARM LOADING BLK 425EA
6	BL-387458J2	CAPSTAN BRAKE PART
7	BL-V1123A050A	TENSION ARM BLK F600EA
8	BM-400682J1	MOTOR DFX-67B3VWB1 [CAPSTAN MOTOR]
9	BM-401296J1	MOTOR E20EL89 [DRUM MOTOR]
10	BM-387503J	MOTOR PART [LOADING MOTOR]
11	*BT-408920J	TRANS POW V1154 EA [EK]
12	*BT-408921J	TRANS POW V1154 EOG [EOG]
13	*BT-408922J	TRANS POW V1154 EOH [EOH]
14	BV-V1102A150A	CASSETTE LOAD BLK 425EA
15	BV-V1102A070A	LEADER S BLK 425EA
16	BV-V1102A080A	LEADER T BLK 425EA
17	BV-V1123A410E	LOWER DRUM BLK F1010EA-D
18	BV-390051J	RF CONVERTER ENC-87976 EK [EK]
19	BV-403409J	RF CONVERTER MDLK6D755A EO [EOG,EOH]
20	BV-V1123A420F	UPPER DRUM BLK F1010EA-D
21	*EC-391843J	C DOUBLE FYD0H223Z 5.5DC
22	ED-397391J	D LED BR3668S RED
23	ED-390011J	D LED GL451 INFRARED [D1]
24	ED-403450J	D LED SE303ARF-C INFRARED
25	ED-386031J	D SILICON CHIP MA110-TW
26	ED-366443	D SILICON H MA700FA5 F10
27	ED-307572	D SILICON H 1SS131
28	*ED-394708J	D SILICON RBA402 200/4.0A
29	ED-511907	D SILICON 1N4002 100/1.0A
30	ED-394936J	D VARACTOR 1SV111
31	ED-364032	D ZENER H HZS10B2J
32	ED-404468J	D ZENER H HZS11C3 T26
33	ED-396065J	D ZENER H HZS12C1
34	ED-404388J	D ZENER H HZS16-1 T26
35	ED-404254J	D ZENER H HZS2B3 T26
36	ED-389686J	D ZENER H HZS2C2
37	ED-400166J	D ZENER H HZS3B2
38	ED-397399J	D ZENER H HZS3C3
39	ED-412008J	D ZENER H HZS33-1L T26
40	ED-387762J	D ZENER H HZS36-3L
41	ED-408719J	D ZENER H HZS4C2
42	ED-408943J	D ZENER H HZS5A2 T26
43	ED-388358J	D ZENER H HZS5C2
44	ED-387919J	D ZENER H HZS6A1L
45	ED-394968J	D ZENER H HZS6B2 T26
46	ED-378530J	D ZENER H HZS6B2L
47	ED-403743J	D ZENER H HZS6B3
48	ED-387783J	D ZENER H HZS6C3L
49	ED-387763J	D ZENER H HZS7B3L
50	ED-408830J	D ZENER H HZS7C1L T26
51	ED-400174J	D ZENER H HZS7C2L
52	ED-367502	D ZENER H HZS9A1L
53	ED-388368J	D ZENER H HZS9B3L
54	ED-387765J	D ZENER H HZS9C1L
55	*EF-601964	FUSE SEMKO T 250V 1.60A
56	*EF-601301	FUSE SEMKO T 250V 2.00A
57	EH-400747J	DL ADL-FE2249Q
58	EH-725827J	FILTER CE SAF32.9MDE70Z [EK]
59	EH-730625J	FILTER CE SAF38.9MZW70Z
60	EH-366894	FILTER CE SFE-4.16MB 4.16MHZ [EOG]
61	EH-394948J	FILTER CE SFT5.5MA [EOH-N/DN]
62	EH-394947J	FILTER CE SFT5.74MA
63	EH-725829J	FILTER CE SFT6.0MA [EK]
64	EH-368948	FILTER CE TPS5.5MW 5.5000MHZ
65	EH-373919	FILTER CE TPS6.0MB [EK]
66	EH-394684J	FILTER EMI ZBF503D-00TA T05
67	EH-394984J	FILTER LC BP SFB41743
68	EH-397511J	FILTER LC BP TH316BQKS-2982QDD [EOH-DN/N]
69	EH-382829J	FILTER LC BP TH316BQM-2110QDAF [EK]
70	EH-364045	FILTER LC FF-78P
71	EH-394858J	FILTER LC LP MYV-2V2
72	EH-402170J	FILTER LC LP SEL-5065
73	EH-732524J	FILTER SAW SAF33.0MDA70Z [EOH-N/DN]
74	EH-732528J	FILTER SAW SAF33.4MC70Z
75	EH-714628	FILTER SAW SAF39.5MZ70Z [EK]
76	EI-394680J	IC AN3171K
77	EI-396454J	IC AN3267K
78	EI-373981J1	IC BA10393N
79	EI-386468J	IC BA3308
80	EI-364896	IC BA6138
81	EI-366892	IC BA7025L [EOG]
82	EI-387586J	IC BA7244BS
83	EI-394983J	IC BA7703K1
84	EI-397285J	IC BA7740S
85	EI-388360J	IC BA7765AS
86	EI-356457	IC BU4013B
87	EI-394937J	IC CF70124
88	EI-394949J	IC IR3P72
89	EI-408959J	IC LA7200
90	EI-394839J	IC LA7332
91	EI-729997J	IC LA7575
92	EI-390053J	IC LA7910 [EOG,EOH]
93	EI-408964J	IC LA7954
94	EI-394951J	IC LB1215
95	EI-403233J	IC LB1641
96	EI-394856J	IC LC8992
97	EI-394861J	IC LVA521S-2
98	EI-401050J	IC LVA523SA2
99	EI-389622J	IC L5631
100	EI-387019J	IC MC1377P
101	EI-408961J	IC MM1031XS
102	EI-403469J	IC MM1068XS
103	EI-404505J	IC MN675201 XDH JTASYP1
104	EI-408434J	IC MV1815-1BA
105	EI-411969J	IC M38173M6-222FP JTXOPD1 [EK]
106	EI-411970J1	IC M38173M6-224FP JTXOPP2 [EOG,EOH]
107	EI-408408J1	IC M50933-128FP JXLCDR2
108	EI-393323J	IC M5218AL-771
109	EI-400756J	IC NJM4558L-B
110	EI-201940	IC NJM4558S
111	EI-400672J	IC S-8052ALB-LE
112	EI-373955	IC S-8053ALR
113	EI-385958J	IC SAA4700 [EOG]
114	EI-397560J	IC SAA7322GP
115	EI-405224J	IC ST24C02
116	EI-410265J	IC ST24C04
117	EI-397123J	IC TA8703S
118	EI-332259	IC TC4052BP
119	EI-408930J	IC TDA8732
120	EI-405722J	IC UPD6450CX-515
121	EI-408449J	IC UPD75004GB-771 JXVPTR1 QF
122	EI-408432J	IC UPD75218CW-012 JXVPT1
123	EI-410125J	IC V53C464AP-80
124	EI-403451J	OSC CE CSB1200J 1.200MHZ
125	EI-403467J	OSC CE CSB500F40 15.680KHZ
126	EI-408450J	OSC CE CST2.45MGW 2.450MHZ
127	EI-373957J1	OSC CE CST4.19MGW 4.194MHZ
128	EI-405327J	OSC CE CST6.00MGW 6.000MHZ
129	EI-368825M	OSC X'TAL C-002RX 32.768KHZ
130	EI-408433J	OSC X'TAL HC-43/U 27750KHZ

Ref.No.	Part No.	Description
131	EI-408933J	OSC X'TAL HC-49/U 11648KHZ
132	EI-408932J	OSC X'TAL HC-49/U 11700KHZ [EOH-DN/N]
133	EI-408931J	OSC X'TAL HC-49/U 13104KHZ [EK]
134	EI-389974J	OSC X'TAL HC-49/U 17.734475MHZ
135	EI-389640J	OSC X'TAL HC-49/U 8000KHZ
136	EI-394673J	OSC X'TAL HC-49/U 8867.238KHZ
137	EI-403347J	OSC X'TAL NR-18-S 16.384MHZ
138	EI-381632J	OSC X'TAL 86686 4.433619MHZ
139	EJ-408427J	CONNECTOR LCD (4) B1043
140	EM-408445J	IND FL FV548G CHARACTER
141	EM-408437J	IND LCD LD-B5444A ENGLISH
142	EO-394950J	COIL DET 1 134-5176
143	EO-396464J	COIL DET 1 134-5177
144	EO-408439J	COIL OSC 1 125-8019-31 70.0KHZ
145	EO-408440J	COIL OSC 1 125-8020-41 70.0KHZ
146	*ER-328278	R FUSE H ERD2FC 1/4W 10R0G
147	*ER-331619	R FUSE H S10 ERD2FC 1/4W 39R0G
148	*ER-401039J	R FUSE V T05 ERD2FCV 1/4W 4R7J
149	*ER-408963J	R FUSE V T05 RF25SCVTP1/4WR33K
150	*ER-400729J	R FUSE V T05 RF25SCVTP1/4WR47K
151	*ER-403405J	R OMF H S12 FS 1W R75J
152	ES-373099	SW LEAF MTS10110MPC1
153	ES-391710J	SW LEAF SPPB51 01-1 NO
154	ES-408470J	SW MICRO HXW0593-01-100 01-1
155	ES-387465J	SW MODE SELECT MMS00070ZLBO [SW1]
156	ES-408428J	SW ROTARY ENCODER SRGPPJ
157	ES-409005J	SW ROTARY ENCODER SRGPPJ-1
158	ES-397339J	SW SLIDE ESD-170252
159	ES-393431J	SW TACT CHIP SKHUAB T12E
160	ES-409007J	SW TACT HKW0606-01-500
161	ET-408988J	DETECTOR SBX1619-52
162	ET-403420J	DETECTOR SG-105LF [PH1][PH2]
163	ET-731437J	TR CHIP DTC114EK
164	ET-713614	TR CHIP 2SA1235 E,F
165	ET-725820J	TR CHIP 2SC2735J
166	ET-356336	TR DTA114ES
167	ET-408827J	TR DTA114TL T05
168	ET-363953	TR DTA114TS
169	ET-354415	TR DTA144ES
170	ET-373985	TR DTA144TS
171	ET-353897	TR DTC114ES
172	ET-360399	TR DTC114TS
173	ET-394881J	TR DTC114WS
174	ET-354371	TR DTC124ES
175	ET-375986	TR DTC124TS
176	ET-408826J	TR DTC143EL T05
177	ET-364060	TR DTC143ES
178	ET-354364	TR DTC143TS
179	*ET-373391	TR DTC143ZS
180	ET-354414	TR DTC144ES
181	ET-370310	TR DTC144TS
182	ET-356236	TR FET 2SK363 GR,BL
183	ET-361490	TR PHOTO PN268 [TR1]
184	ET-390009J	TR PHOTO PT493F [TR4]
185	ET-364040	TR UN421D
186	ET-356224	TR 2SA1286 G,H,J F05
187	ET-353899	TR 2SA1317 S,T,U
188	*ET-373210	TR 2SB1187 E,F
189	*ET-404498J	TR 2SB1306 Q,R T05
190	ET-388338J	TR 2SB1425 S,E
191	ET-375777	TR 2SC2926S P,Q
192	ET-397160J	TR 2SC3330 R,S,T,U,V
193	*ET-366168	TR 2SD1292 Q,R
194	*ET-373025	TR 2SD1944 J1,J2,K
195	*ET-405622J	TR 2SD2061 E,F
196	ET-370819	TR.CHIP 2SC3052
197	ET-405342J	TR.CHIP 2SD1620
198	EV-401032J	VR SLIDE RS30B221J K203X2NO CL
199	EX-405691J	THERMISTOR NTH5D332KA
200	HE-390013J	HEAD E HVFME0020A
201	HR-405340J	HEAD COMBO HVMZA1121A
202	MB-407117J	BELT CAPSTAN (3)
203	MI-404552J	IDLER (2) PART
204	ML-391745J3	ARM DAMPER
205	ML-387350J1	ARM LID OPENER
206	ML-387277J3	ARM REVIEW PART
207	ML-387402J1	LEVER TRIGGER
208	ML-387316J	MAIN BRAKE (S) PART
209	ML-387318J	MAIN BRAKE (T) PART
210	ML-407119J	REVIEW BRAKE (3) PART
211	ML-404567J1	SLIDER BRAKE (3) PART
212	ML-404944J	SLIDER TRIGGER (2)
213	MP-404852J	PINCH ROLLER (2) PART
214	MR-387406J	HOLDER THRUST WORM
215	MR-391968J	PULLEY TRIGGER (2)
216	MR-387286J1	ROLLER IMPEDANCE
217	MT-404547J	DISK (3) PART
218	MZ-404577J	DISK CLUTCH (2) PART
219	MZ-404538J	GEAR CAM SLIDER (3)
220	MZ-387335J	GEAR EJECT
221	MZ-387333J	GEAR FRONT LOADING
222	MZ-404995J	GEAR MID PART
223	MZ-V1102A090A	GEAR TOGGLE (S) BLK 425EA
224	MZ-V1102A100A	GEAR TOGGLE (T) BLK 425EA
225	MZ-387332J	GEAR WORM WHEEL
226	MZ-401686J1	GEAR WORM (2)

HEAD DRUM BLOCK



2. HEAD DRUM BLOCK

Ref.No.	Part No.	Description
1	BV-V1123A410E	LOWER DRUM BLK F1010EA-D
2	BV-V1123A420F	UPPER DRUM BLK F1010EA-D
3	ZS-321298	BID30X08STL CMT
4	SZ-387388J	HOLDER FPC
5	ZS-379405	BID30X06STL CMT
6	MA-387474J3	BASE DRUM
7	ZS-563444	BID26X08STL CMT
8	BM-401296J1	MOTOR E20EL89 [DRUM MOTOR]
9	ZS-467796	PAN26X12STL CMT
11	ZS-379350	PAN30X06STL CMT
12	ZS-336714	ST BID30X12STL CMT
13	ML-392137J	ARM IMPEDANCE PART
14	MZ-392144J	PLATE IMPEDANCE PART
15	ZG-392143J	SP TORSION IMPEDANCE
16	ZW-392224J	SLIT W26X050X050PSL
17	ZW-392225J	PW21X044X025PSL
18	MR-364335	ROLLER IMPEDANCE
19	ZW-392226J	SLIT W16X040X050PSL
20	VT-401282J	EARTH BRUSH PART AG
21	ZS-364543	DT BID30X06STL CMT

NOTE:
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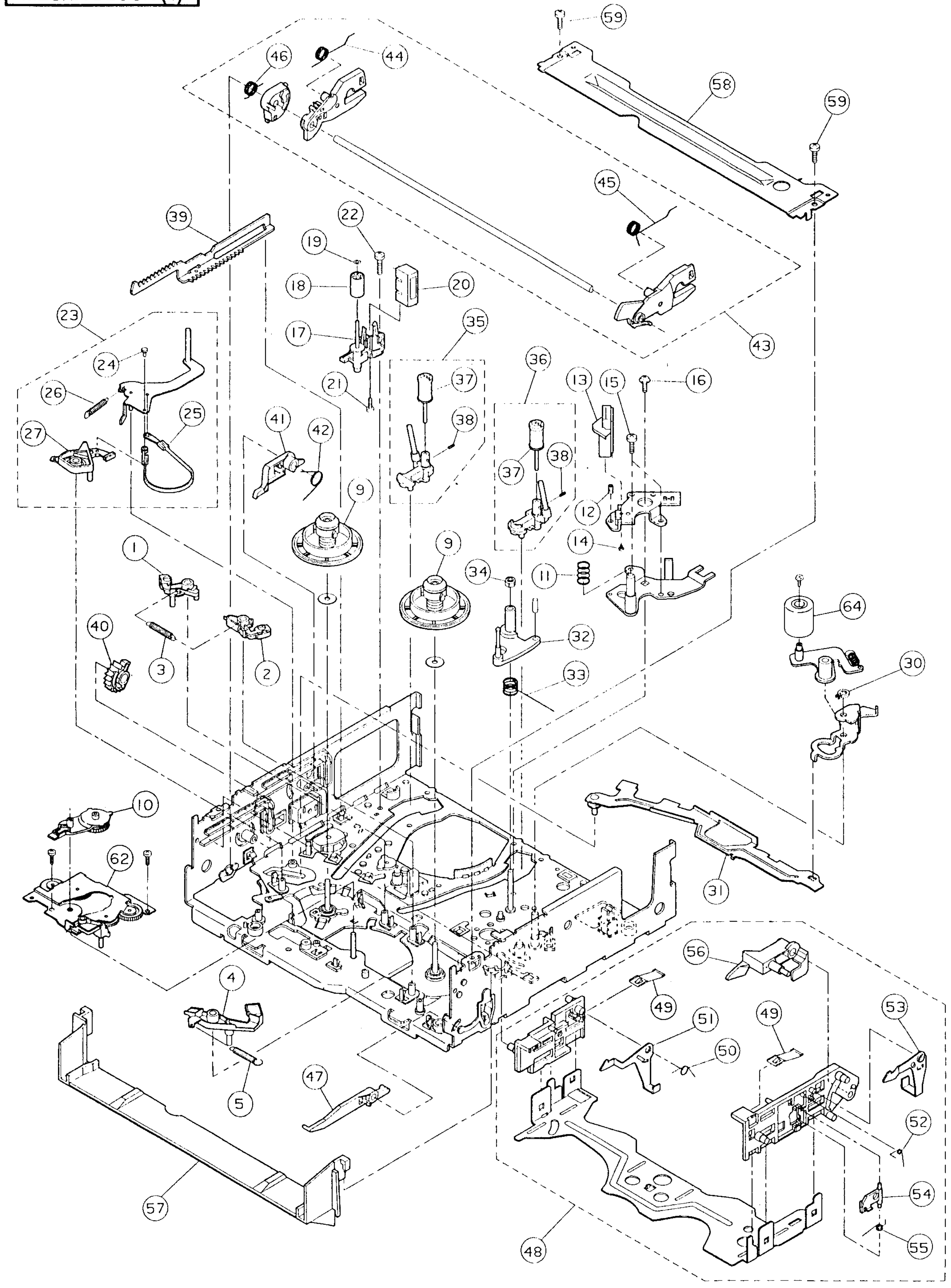
MECHA BLOCK (1)



3. MECHA BLOCK (1)

Ref.No.	Part No.	Description
1	ML-387316J	MAIN BRAKE (S) PART
2	ML-387318J	MAIN BRAKE (T) PART
3	ZG-387320J	SP PULL MAIN BRAKE
4	ML-407119J	REVIEW BRAKE (3) PART
5	ZG-387323J	SP PULL REVIEW BRAKE
8	ZW-389814J	PW31X110X050PSL
9	MT-404547J	DISK (3) PART
10	MI-404552J	IDLER (2) PART
11	ZG-387438J1	SP PUSH A/C
12	ZG-373900	6SET30X080SCM PKR CP
13	HR-405340J	HEAD COMBO HVMZA1121A
14	ZS-404844J	PAN20X02STL BZN PS1
15	ZS-321298	BID30X08STL CMT
16	ZS-389853J	DT BID30X06STL CMT C080
17	MZ-402760J2	HOLDER FE HEAD PART B
18	MR-387286J1	ROLLER IMPEDANCE
19	ZW-374445	SLIT W17X032X025PSL
20	HE-390013J	HEAD E HVFME0020A
22	ZS-336714	ST BID30X12STL CMT
23	BL-V1123A050A	TENSION ARM BLK F600EA
24	SZ-387263J4	HOLDER LEVER TENSION
25	ML-390768J4	TENSION BAND PART
26	ZG-395470J	SP PULL TENSION (2)
27	MZ-395471J3	TENSION BRAKE PART
30	ZW-332843	RETAINING RING GRIP 380STL ACP
31	ML-387431J1	SLIDER PINCH PART
32	ML-387277J3	ARM REVIEW PART
33	ZG-387282J	SP TORSION REVIEW
34	ZW-401776J	NUT REVIEW
35	BV-V1102A070A	LEADER S BLK 425EA
36	BV-V1102A080A	LEADER T BLK 425EA
37	VT-387394J1	GUIDE ROLLER D8 PART
38	ZS-374458	6SET20X030SCM PKR FP
39	ML-387428J	SLIDER FRONT LOADING
40	MZ-387335J	GEAR EJECT
41	ML-391745J3	ARM DAMPER
42	ZG-395567J	SP TORSION ARM DAMPER
43	BL-V1102A140A	ARM LOADING BLK 425EA
44	ZG-387417J	SP TORSION LOAD (S)
45	ZG-387418J	SP TORSION LOAD (T)
46	ZG-392831J	SP TORSION JOINT (2)
47	ML-387350J1	ARM LID OPENER
48	BV-V1102A150A	CASSETTE LOAD BLK 425EA
49	ZG-387348J1	SP PLATE HOLDER
50	ZG-387421J	SP TORSION DAMPER (S)
51	ML-387345J	LEVER DAMPER (S)
52	ZG-388290J1	SP TORSION DAMPER (T)
53	ML-387346J	LEVER DAMPER (T)
54	ML-387344J	LEVER LOCK RELEASE
55	ZG-387420J1	SP TORSION RELEASE
56	ML-387349J2	ARM SHUTTER
57	SE-395554J	GUIDE FRONT (2)
58	MZ-387351J2	PLATE UPPER
59	ZS-358936	ST BID30X06STL CMT
62	MZ-404995J	GEAR MID PART
64	MP-404852J	PINCH ROLLER (2) PART
70	BB-V1130A020F	MECHA DECK BLK F1010EOH-D

NOTE:

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4. MECHA BLOCK (2)

Ref.No.	Part No.	Description
1	ML-404567J1	SLIDER BRAKE (3) PART
2	ML-404944J	SLIDER TRIGGER (2)
3	ML-387402J1	LEVER TRIGGER
4	ZG-387468J	SP PULL SLIDER
5	ZG-387403J	SP TORSION COUPLING
6	ZW-389923J	PW26X060X050PSL
7	MZ-404577J	DISK CLUTCH (2) PART
8	ZW-387492J	SLIT W21X040X050PSL
9	BM-400682J1	MOTOR DFX-67B3VWB1 [CAPSTAN MOTOR]
10	ZS-365149	PT BID26X06STL CMT
11	MB-407117J	BELT CAPSTAN (3)
12	EA-404543J	PC (#) SENSOR (2)KFX
13	ED-390011J	D LED GL451 INFRARED [D1]
14	ET-403420J	DETECTOR SG-105LF [PH1][PH2]
15	EJ-387497J	SOCKET HOUSING 5062-30-10-13 [PS1]
16	EJ-381837J	SOCKET 174074-5 5P [P1]
17	ES-387465J	SW MODE SELECT MMS00070ZLBO [SW1]
19	ET-390009J	TR PHOTO PT493F [TR4]
20	EW-389313J	CORD FFC P1.25 L=120 13P [WP1]
21	MZ-387430J	HOLDER D-LED
22	MZ-387445J	HOLDER S SENSOR
23	MZ-404542J	HOLDER PHOTO SENSOR (2)
24	ET-361490	TR PHOTO PN268 [TR1]
25	MZ-V1102A090A	GEAR TOGGLE (S) BLK 425EA
26	MZ-V1102A100A	GEAR TOGGLE (T) BLK 425EA
27	ZG-387413J1	SP PULL TOGGLE
28	MZ-387332J	GEAR WORM WHEEL
29	MZ-404538J	GEAR CAM SLIDER (3)
30	MZ-387333J	GEAR FRONT LOADING
31	BM-387503J	MOTOR PART [LOADING MOTOR]
32	MZ-401686J1	GEAR WORM (2)
33	MR-391968J	PULLEY TRIGGER (2)
34	ZG-387443J	SP TRIGGER
35	MR-387406J	HOLDER THRUST WORM
36	ZS-425981	BID30X03STL CMT
37	BL-387458J2	CAPSTAN BRAKE PART
38	ZG-387502J	SP PULL CAPSTAN BRAKE
39	ES-373099	SW LEAF MTS10110MPC1
40	ZS-389950J	PT BID26X10STL CMT
41	ZS-358936	ST BID30X06STL CMT
42	ML-387311J2	ARM COUPLING
43	ES-408470J	SW MICRO HXW0593-01-100 01-1

NOTE:

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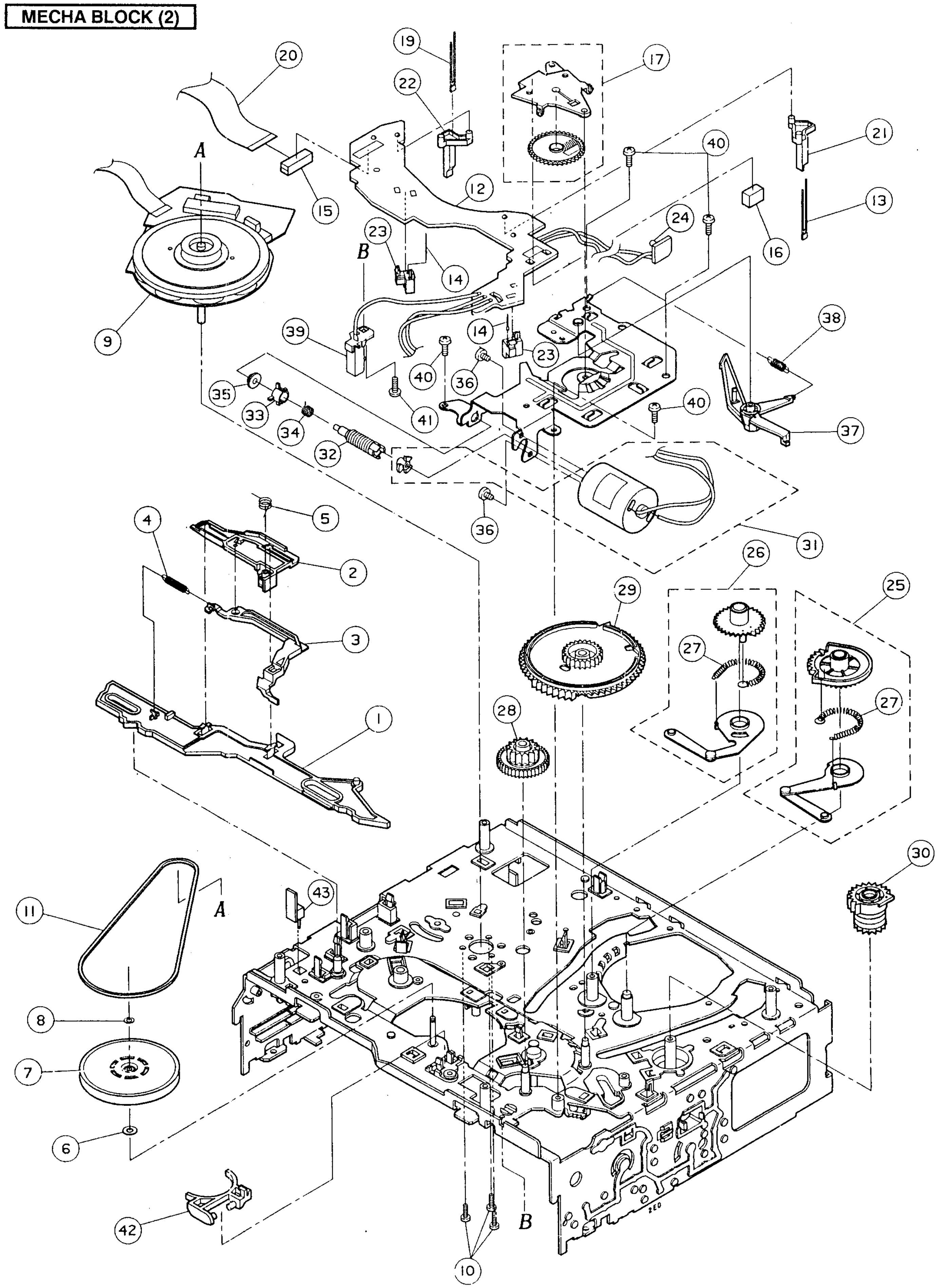


5. P.C BOARD BLOCK

Ref.No.	Part No.	Description
1A	BA-V1154A600A	PC (#) MAIN BLK F1000EK-VN
1B	BA-V1154A600B	PC (#) MAIN BLK F1000EOG-VD
1C	BA-V1154A600D	PC (#) MAIN BLK F1010EOH-D (E)
1D	BA-V1154A600E	PC (#) MAIN BLK F1010EOH-D (V)
1E	BA-V1154A600F	PC (#) MAIN BLK F1010EOH-N
1F	BA-V1154A600H	PC (#) MAIN BLK F1030EOH-DN
2A	BA-V1154A610A	PC PRE AMP BLK F1000EK-VN [EK]
2B	BA-V1154A610B	PC PRE AMP BLK F1010EOH-D [EOG,EOH]
3A	BA-V1154A620A	PC OPERATION (1) BLK F1000EK-VN [EK]
3B	BA-V1154A620B	PC OPERATION (1) BLK F1000EOG-VD [EOG]
3C	BA-V1154A620D	PC OPERATION (1) BLK F1010EOH-D [EOH-D]
3D	BA-V1154A620E	PC OPERATION (1) BLK F1010EOH-N [EOH-DN/N]
4A	BA-V1154A630A	PC—OPERATION (2) BLK F1000EK-VN [EK]
4B	BA-V1154A630B	PC—OPERATION (2) BLK F1000EOG-VD [EOG]
4C	BA-V1154A630D	PC—OPERATION (2) BLK F1010EOH-D [EOH-D]
4D	BA-V1154A630E	PC—OPERATION (2) BLK F1010EOH-N [EOH-DN/N]
5A	BA-V1154A500A	PC—POWER (1) BLK F1000EK-VN [EK,EOH]
5B	BA-V1154A500B	PC—POWER (1) BLK F1000EOG-VD [EOG]
6A	BA-V1154A650A	PC (#) D-NICAM BLK F1000EK-VN [EK]
6B	BA-V1154A650C	PC (#) D-NICAM BLK F1030EOH-DN [EOH-DN]
6C	BA-V1154A650B	PC (#) D-NICAM BLK F1010EOH-N [EOH-N]
7	BA-V1154A660A	PC D-MULTI BLK F1010EOH-D [EOG,EOH-D]
8A	BA-V1154A720A	PC (#) IN-OUT BLK F1000EK-VN [EK,EOH-DN]
8B	BA-V1154A720C	PC (#) IN-OUT BLK F1010EOH-D [EOH-D,EOH-N]
9	BA-V1154A690A	PC—CANAL PLUS BLK F1000EOG-VD [EOG]

PC (#) MAIN BLK CONSISTS OF FOLLOWING P.C BOARDS.
- MAIN P.C BOARD
- VIDEO P.C BOARD
- PC (#) IN-OUT BLK
- VIF UNIT

PC (#) OPERATION (2) BLK CONSISTS OF FOLLOWING P.C BOARDS.
- OPERATION (2) P.C BOARD
- FRONT P.C BOARD
- VR P.C BOARD

PC (#) POWER (1) BLK CONSISTS OF FOLLOWING P.C BOARDS.
- POWER SUPPLY (1) P.C BOARD
- POWER SUPPLY (2) P.C BOARD

PC (#) D-NICAM BLK CONSISTS OF FOLLOWING P.C BOARDS.
- NICAM P.C BOARD
- DN—MULTI P.C BOARD

PC(#) IN-OUT BLK CONSISTS OF FOLLOWING P.C BOARDS.
- IN-OUT (A) P.C BOARD
- IN-OUT (B) P.C BOARD

PC (#) CANAL PLUS BLK CONSISTS OF FOLLOWING P.C BOARDS.
- CANAL PLUS (A) P.C BOARD
- CANAL PLUS (B) P.C BOARD

6. MAIN P.C BOARD

Ref.No.	Part No.	Description
C110	*EC-391843J	C DOUBLE FYD0H223Z 5.5DC
D1	ED-307572	D SILICON H 1SS131 [EOG,EOH-D(V)]
D2	ED-307572	D SILICON H 1SS131 [EOG,EOH-D(V)]
D3	ED-307572	D SILICON H 1SS131 [EOH-D(V)]
D5	ED-307572	D SILICON H 1SS131 [EOH]
D6	ED-367502	D ZENER H HZS9A1L [EOH]
D7	ED-394968J	D ZENER H HZS6B2 T26 [EOH]
D8	ED-307572	D SILICON H 1SS131 [EOH]
D9	ED-307572	D SILICON H 1SS131 [EOH]
D10	ED-307572	D SILICON H 1SS131
D11	ED-307572	D SILICON H 1SS131
D12	ED-387765J	D ZENER H HZS9C1L
D13	ED-307572	D SILICON H 1SS131
D14	ED-408943J	D ZENER H HZS5A2 T26
D16	ED-387919J	D ZENER H HZS6A1L
D17	ED-307572	D SILICON H 1SS131
D18	ED-307572	D SILICON H 1SS131
D19	ED-307572	D SILICON H 1SS131
D70	ED-388368J	D ZENER H HZS9B3L
D101	ED-387919J	D ZENER H HZS6A1L
D102	ED-397399J	D ZENER H HZS3C3
D107	ED-404388J	D ZENER H HZS16-1 T26
D108	ED-387783J	D ZENER H HZS6C3L
D110	ED-403743J	D ZENER H HZS6B3
D112	ED-396065J	D ZENER H HZS12C1
D200	ED-307572	D SILICON H 1SS131
D201	ED-388368J	D ZENER H HZS9B3L
D203	ED-397399J	D ZENER H HZS3C3 [EK,EOH]
D204	ED-307572	D SILICON H 1SS131
D205	ED-307572	D SILICON H 1SS131
D206	ED-307572	D SILICON H 1SS131
D207	ED-307572	D SILICON H 1SS131
D208	ED-307572	D SILICON H 1SS131
D209	ED-307572	D SILICON H 1SS131
D210	ED-389686J	D ZENER H HZS2C2
D211	ED-400166J	D ZENER H HZS3B2
D212	ED-307572	D SILICON H 1SS131
D213	ED-307572	D SILICON H 1SS131 [EK,EOH]
D214	ED-387919J	D ZENER H HZS6A1L [EK,EOH]
D300	ED-307572	D SILICON H 1SS131
D301	ED-307572	D SILICON H 1SS131
D302	ED-307572	D SILICON H 1SS131
D303	ED-307572	D SILICON H 1SS131
D304	ED-387919J	D ZENER H HZS6A1L
D305	ED-387919J	D ZENER H HZS6A1L
D401	ED-307572	D SILICON H 1SS131
D402	ED-307572	D SILICON H 1SS131
D403	ED-387763J	D ZENER H HZS7B3L
D404	ED-388368J	D ZENER H HZS9B3L
D405	ED-307572	D SILICON H 1SS131
D406	ED-307572	D SILICON H 1SS131
D407	ED-307572	D SILICON H 1SS131
D408	ED-307572	D SILICON H 1SS131
D409	ED-307572	D SILICON H 1SS131
D410	ED-307572	D SILICON H 1SS131
D411	ED-307572	D SILICON H 1SS131
D412	ED-307572	D SILICON H 1SS131
D413	ED-307572	D SILICON H 1SS131
D414	ED-307572	D SILICON H 1SS131
D415	ED-307572	D SILICON H 1SS131
D416	ED-511907	D SILICON 1N4002 100/1.0A
D417	ED-511907	D SILICON 1N4002 100/1.0A
D501	ED-307572	D SILICON H 1SS131
FL200	EO-408440J	COIL OSC 1 125-8020-41 70.0KHZ
FL300	EH-394984J	FILTER LC BP SFB41743
FR200	*ER-401039J	R FUSE V T05 ERD2FCV 1/4W 4R7J
FR401	*ER-400729J	R FUSE V T05 RF25SCVTP1/4WR47K
IB300	EH-378541J	COMP R RGLE3X 473J
IB301	EH-378541J	COMP R RGLE3X 473J

Ref.No.	Part No.	Description
IB302	EH-378541J	COMP R RGLE3X 473J
IC1	EI-390053J	IC LA7910 [EOG,EOH]
IC2	EI-389622J	IC L5631
IC200	EI-388360J	IC BA7765AS
IC300	EI-394983J	IC BA7703K1
IC301	EI-364896	IC BA6138
IC401	EI-404505J	IC MN675201 XDH JTASYP1
IC402	EI-403233J	IC LB1641
IC403	EI-400756J	IC NJM4558L-B
IC404	EI-373981J1	IC BA10393N
IC405	EI-373955	IC S-8053ALR
IC406	EI-405224J	IC ST24C02
IC501	EI-405722J	IC UPD6450CX-515
IC502	EI-403469J	IC MM1068XS
IF1A	BV-408937J	VIF UNIT JTX EK [EK]
IF1B	BV-408938J	VIF UNIT JTX EOG [EOG,EOH-D(V)]
IF1C	BV-408940J	VIF UNIT JTX EOHD [EOH-D(E)]
IF1D	BV-408941J	VIF UNIT JTX EOHN [EOH-DN/N]
MD1A	BV-390051J	RF CONVERTER ENC-87976 EK [EK]
MD1B	BV-403409J	RF CONVERTER MDLK6D755A EO [EOG,EOH]
L2	EO-351869	COIL FIX 1 LAP02 F05 820K [EOG,EOH]
L200	EO-354600	COIL FIX 1 LAP02 F05 101K
L201	EO-390717J	COIL FIX 1 LHL06TB T05 103J
L202	EO-351866	COIL FIX 1 LAP02 F05 330K
L203	EO-354600	COIL FIX 1 LAP02 F05 101K
L300	EO-354600	COIL FIX 1 LAP02 F05 101K
L301	EO-354600	COIL FIX 1 LAP02 F05 101K
L302	EO-354600	COIL FIX 1 LAP02 F05 101K
L401	EO-381196J	COIL FIX 1 EL0405SKI 470K
L402	*EO-345881	COIL FIX 1 EL0606SKI 101J
L403	EO-354600	COIL FIX 1 LAP02 F05 101K
L404	EO-354600	COIL FIX 1 LAP02 F05 101K
L405	EO-388087J	COIL FIX 1 LF-5.0S F05 331K
L406	EO-354600	COIL FIX 1 LAP02 F05 101K
L501	EO-345876	COIL FIX 1 EL0606SKI 470J
L502	EO-351866	COIL FIX 1 LAP02 F05 330K
L503	EO-345881	COIL FIX 1 EL0606SKI 101J
L504	EO-351866	COIL FIX 1 LAP02 F05 330K
L505	EO-345881	COIL FIX 1 EL0606SKI 101J
L506	EO-345881	COIL FIX 1 EL0606SKI 101J
R449	*ER-403405J	R OMF H S12 FS 1W R75J
TR1	ET-353899	TR 2SA1317 S,T,U
TR2	ET-397160J	TR 2SC3330 R,S,T,U,V
TR3	ET-353899	TR 2SA1317 S,T,U [EK,EOG]
TR4	ET-356236	TR FET 2SK363 GR,BL [EOH]
TR5	ET-397160J	TR 2SC3330 R,S,T,U,V [EOH]
TR6	ET-375986	TR DTC124TS
TR7	ET-370310	TR DTC144TS [EOH]
TR9	ET-375777	TR 2SC2926S P,Q
TR10	ET-388338J	TR 2SB1425 S,E
TR11	*ET-405622J	TR 2SD2061 E,F
TR13	ET-397160J	TR 2SC3330 R,S,T,U,V
TR14	ET-397160J	TR 2SC3330 R,S,T,U,V
TR15	ET-353899	TR 2SA1317 S,T,U
TR18	ET-388338J	TR 2SB1425 S,E
TR19	ET-354414	TR DTC144ES
TR20	ET-364040	TR UN421D
TR21	ET-354414	TR DTC144ES
TR23	ET-397160J	TR 2SC3330 R,S,T,U,V [EOG,EOH]
TR24	ET-397160J	TR 2SC3330 R,S,T,U,V
TR70	*ET-366168	TR 2SD1292 Q,R
TR103	ET-397160J	TR 2SC3330 R,S,T,U,V
TR104	ET-356336	TR DTA114ES
TR200	ET-366168	TR 2SD1292 Q,R
TR201	ET-397160J	TR 2SC3330 R,S,T,U,V
TR202	ET-397160J	TR 2SC3330 R,S,T,U,V
TR203	ET-397160J	TR 2SC3330 R,S,T,U,V [EK,EOH]
TR204	ET-354414	TR DTC144ES [EK,EOH]
TR205	ET-360399	TR DTC114TS [EK,EOH-DN/N]
TR207	*ET-353899	TR 2SA1317 S,T,U
TR208	ET-364040	TR UN421D
TR209	ET-397160J	TR 2SC3330 R,S,T,U,V
TR210	ET-356336	TR DTA114ES
TR211	ET-397160J	TR 2SC3330 R,S,T,U,V
TR212	ET-397160J	TR 2SC3330 R,S,T,U,V
TR213	ET-354414	TR DTC144ES [EK,EOH]
TR214	ET-354414	TR DTC144ES
TR300	ET-397160J	TR 2SC3330 R,S,T,U,V
TR301	ET-353899	TR 2SA1317 S,T,U
TR302	ET-397160J	TR 2SC3330 R,S,T,U,V
TR303	ET-397160J	TR 2SC3330 R,S,T,U,V
TR304	ET-360399	TR DTC114TS
TR305	ET-360399	TR DTC114TS
TR306	ET-356336	TR DTA114ES
TR307	ET-353897	TR DTC114ES
TR308	ET-353897	TR DTC114ES
TR309	ET-363953	TR DTA114TS
TR312	ET-353897	TR DTC114ES
TR401	ET-354414	TR DTC144ES
TR402	ET-354414	TR DTC144ES
TR403	ET-397160J	TR 2SC3330 R,S,T,U,V
TR404	ET-354414	TR DTC144ES
TR405	ET-388338J	TR 2SB1425 S,E
TR407	ET-354414	TR DTC144ES
TR408	ET-373985	TR DTA144TS
TR409	ET-373985	TR DTA144TS
TR410	ET-373985	TR DTA144TS
TR411	ET-354414	TR DTC144ES
TR501	ET-356336	TR DTA114ES [EOG,EOH]
TR502	ET-356336	TR DTA114ES [EOG,EOH]
TR503	ET-397160J	TR 2SC3330 R,S,T,U,V
TR504	ET-354414	TR DTC144ES
TR505	ET-353899	TR 2SA1317 S,T,U
TR506	ET-397160J	TR 2SC3330 R,S,T,U,V [EOG,EOH]
TR507	ET-354414	TR DTC144ES [EOG,EOH]
TR508	ET-353899	TR 2SA1317 S,T,U
TR509	ET-353899	TR 2SA1317 S,T,U
TR510	ET-353899	TR 2SA1317 S,T,U
TU1A	EE-387607J1	TV TUNER TERB1-008B EK [EK]
TU1B	EE-387604J2	TV TUNER TERE1-007C EOG [EOG]
TU1C	EE-390143J2	TV TUNER TERE3-001C EOH [EOH-D(E),EOH-D/DN/N)]
TU1D	EE-389626J1	TV TUNER TERE3-003B FTZ.EOH [EOH-D(V)]
VC501	EC-394757J	C S-FIX H T05 VCT51F 5.5-30
VR200	EV-404295J	R S-FIX H T05 KVSF637T 0.1W104
VR201	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332
VR300	EV-405665J	R S-FIX H T05 KVSF637T 0.1W333
VR301	EV-405657J	R S-FIX H T05 KVSF637T 0.1W103
VR302	EV-405665J	R S-FIX H T05 KVSF637T 0.1W333
VR303	EV-405657J	R S-FIX H T05 KVSF637T 0.1W103
VR304	EV-405657J	R S-FIX H T05 KVSF637T 0.1W103
VR305	EV-404297J	R S-FIX H T05 KVSF637T 0.1W153
VR306	EV-404297J	R S-FIX H T05 KVSF637T 0.1W153
VR401	EV-405665J	R S-FIX H T05 KVSF637T 0.1W333
X401	EI-389640J	OSC X'TAL HC-49/U 8000KHZ
X501	EI-389974J	OSC X'TAL HC-49/U 17.734475MHZ
X502	EI-403467J	OSC CE CSB500F40 15.680KHZ

7. VIDEO P.C BOARD

Ref.No.	Part No.	Description
D601	ED-366443	D SILICON H MA700FA5 F10
D602	ED-307572	D SILICON H 1SS131
D603	ED-307572	D SILICON H 1SS131
D604	ED-307572	D SILICON H 1SS131
D605	ED-307572	D SILICON H 1SS131
D606	ED-307572	D SILICON H 1SS131
D607	ED-307572	D SILICON H 1SS131
D608	ED-307572	D SILICON H 1SS131
D609	ED-307572	D SILICON H 1SS131
D610	ED-307572	D SILICON H 1SS131
D611	ED-307572	D SILICON H 1SS131
D701	ED-307572	D SILICON H 1SS131
D702	ED-307572	D SILICON H 1SS131
D703	ED-307572	D SILICON H 1SS131
D704	ED-307572	D SILICON H 1SS131
D790	ED-378530J	D ZENER H HZS6B2L
D801	ED-307572	D SILICON H 1SS131
D802	ED-307572	D SILICON H 1SS131
D881	ED-307572	D SILICON H 1SS131
D882	ED-307572	D SILICON H 1SS131
DL800	EH-400747J	DL ADL-FE2249Q
FL600	EH-402170J	FILTER LC LP SEL-5065
FL770	EH-394858J	FILTER LC LP MYV-2V2
FL800	EH-364045	FILTER LC FF-78P
FL870	EH-366894	FILTER CE SFE-4.16MB 4.16MHZ [EOG]
IC600	EI-396454J	IC AN3267K
IC700	EI-394951J	IC LB1215
IC701	EI-201940	IC NJM4558S
IC770	EI-394856J	IC LC8992
IC800	EI-394839J	IC LA7332
IC870	EI-366892	IC BA7025L [EOG]
IC880	EI-373981J1	IC BA10393N
L601	EO-345880	COIL FIX 1 EL0606SKI 820J
L602	EO-410091J	COIL FIX 1 SPT0203SA T26 100J
L603	EO-410094J	COIL FIX 1 SPT0203SA T26 180J
L605	EO-354600	COIL FIX 1 LAP02 F05 101K
L606	EO-354600	COIL FIX 1 LAP02 F05 101K
L607	EO-354600	COIL FIX 1 LAP02 F05 101K
L608	EO-410103J	COIL FIX 1 SPT0203SA T26 151J
L609	EO-351868	COIL FIX 1 LAP02 F05 470K
L610	EO-354600	COIL FIX 1 LAP02 F05 101K
L701	EO-345881	COIL FIX 1 EL0606SKI 101J
L772	EO-410089J	COIL FIX 1 SPT0203SA T26 6R8J
L773	EO-345880	COIL FIX 1 EL0606SKI 820J
L774	EO-330244	COIL FIX 1 EL0606SKI 2R2K
L801	EO-345880	COIL FIX 1 EL0606SKI 820J
L802	EO-364966	COIL FIX 1 LAP02 F05 120K [EOG,EOH]
L803	EO-388087J	COIL FIX 1 LF-5.0S F05 331K
L804	EO-381197J	COIL FIX 1 EL0405SKI 471K
L805	EO-393331J	COIL FIX 1 EL0405RA T02 390K
L806	EO-353900	COIL FIX 1 LAP02 F05 150K
L807	EO-387799J	COIL FIX 1 EL0405SKI 180K
L808	EO-345880	COIL FIX 1 EL0606SKI 820J
L809	EO-403342J	COIL FIX 1 LAP02 F05 4R7K
L810	EO-345880	COIL FIX 1 EL0606SKI 820J
L811	EO-351868	COIL FIX 1 LAP02 F05 470K
L870	EO-478181	COIL FIX 1 FL09H 153J [EOG]
L871	EO-345880	COIL FIX 1 EL0606SKI 820J [EOG]
L881	EO-351869	COIL FIX 1 LAP02 F05 820K
TR601	ET-354414	TR DTC144ES
TR602	ET-354415	TR DTA144ES
TR603	ET-354414	TR DTC144ES
TR604	ET-397160J	TR 2SC3330 R,S,T,U,V
TR605	ET-354414	TR DTC144ES
TR606	ET-353897	TR DTC114ES
TR608	ET-354415	TR DTA144ES
TR609	ET-353899	TR 2SA1317 S,T,U
TR610	ET-397160J	TR 2SC3330 R,S,T,U,V
TR611	ET-397160J	TR 2SC3330 R,S,T,U,V
TR612	ET-354371	TR DTC124ES
TR613	ET-353899	TR 2SA1317 S,T,U
TR614	ET-353899	TR 2SA1317 S,T,U
TR615	ET-354414	TR DTC144ES
TR616	ET-354414	TR DTC144ES
TR617	ET-364040	TR UN421D

Ref.No.	Part No.	Description
TR701	ET-397160J	TR 2SC3330 R,S,T,U,V
TR702	ET-397160J	TR 2SC3330 R,S,T,U,V
TR703	ET-397160J	TR 2SC3330 R,S,T,U,V
TR704	ET-397160J	TR 2SC3330 R,S,T,U,V
TR705	ET-354414	TR DTC144ES
TR706	ET-397160J	TR 2SC3330 R,S,T,U,V
TR707	ET-397160J	TR 2SC3330 R,S,T,U,V
TR708	ET-397160J	TR 2SC3330 R,S,T,U,V
TR709	ET-397160J	TR 2SC3330 R,S,T,U,V
TR710	ET-353899	TR 2SA1317 S,T,U
TR711	ET-353899	TR 2SA1317 S,T,U
TR712	ET-354414	TR DTC144ES
TR713	ET-354415	TR DTA144ES
TR771	ET-353899	TR 2SA1317 S,T,U
TR791	ET-356224	TR 2SA1286 G,H,J F05
TR800	ET-354414	TR DTC144ES [EOG,EOH]
TR801	ET-354415	TR DTA144ES [EOG,EOH]
TR802	ET-397160J	TR 2SC3330 R,S,T,U,V
TR803	ET-397160J	TR 2SC3330 R,S,T,U,V
TR804	ET-397160J	TR 2SC3330 R,S,T,U,V
TR805	ET-397160J	TR 2SC3330 R,S,T,U,V
TR806	ET-397160J	TR 2SC3330 R,S,T,U,V
TR807	ET-397160J	TR 2SC3330 R,S,T,U,V
TR809	ET-353897	TR DTC114ES
TR810	ET-353897	TR DTC114ES
TR811	ET-356336	TR DTA114ES
TR812	ET-397160J	TR 2SC3330 R,S,T,U,V
TR814	ET-353899	TR 2SA1317 S,T,U
TR815	ET-397160J	TR 2SC3330 R,S,T,U,V
TR817	ET-388338J	TR 2SB1425 S,E
TR818	ET-353899	TR 2SA1317 S,T,U
TR871	ET-397160J	TR 2SC3330 R,S,T,U,V [EOG]
TR872	ET-397160J	TR 2SC3330 R,S,T,U,V [EOG]
TR881	ET-397160J	TR 2SC3330 R,S,T,U,V
TR882	ET-397160J	TR 2SC3330 R,S,T,U,V
TR883	ET-353899	TR 2SA1317 S,T,U
TR884	ET-397160J	TR 2SC3330 R,S,T,U,V
VR600	EV-404300J	R S-FIX H T05 KVSF637T 0.1W472
VR601	EV-405659J	R S-FIX H T05 KVSF637T 0.1W682
VR602	EV-404299J	R S-FIX H T05 KVSF637T 0.1W332
VR603	EV-404297J	R S-FIX H T05 KVSF637T 0.1W153
VR604	EV-404297J	R S-FIX H T05 KVSF637T 0.1W153
VR770	EV-405657J	R S-FIX H T05 KVSF637T 0.1W103
X800	EI-381632J	OSC X'TAL 86686 4.433619MHZ

8. IN-OUT (A) BLK

Ref.No.	Part No.	Description
L1	EO-345881	COIL FIX 1 EL0606SKI 101J
PJ1	EJ-389323J	PIN J YKB11-0180 1P
PJ2	EJ-389324J	PIN J YKB11-0178 1P
PJ3	EJ-389324J	PIN J YKB11-0178 1P
PJ4	EJ-389325J	PIN J YKB11-0179 1P
PJ5	EJ-389325J	PIN J YKB11-0179 1P
PJ8	EJ-389864J	SOCKET M1817 21P
PJ9	EJ-389864J	SOCKET M1817 21P
TR3	ET-397160J	TR 2SC3330 R,S,T,U,V
TR4	ET-397160J	TR 2SC3330 R,S,T,U,V
TR5	ET-397160J	TR 2SC3330 R,S,T,U,V
TR6	ET-397160J	TR 2SC3330 R,S,T,U,V
1	SP-404383J	PANEL REAR JACK EK (2)

9. IN-OUT (B) BLK

Ref.No.	Part No.	Description
FR101	*ER-408963J	R FUSE V T05 RF25SCVTP1/4WR33K
IC101	EI-408959J	IC LA7200
IC102	EI-408959J	IC LA7200
IC103	EI-408959J	IC LA7200
IC104	EI-408961J	IC MM1031XS
IC105	EI-386468J	IC BA3308
IC106	EI-394861J	IC LVA521S-2
L102	EO-345881	COIL FIX 1 EL0606SKI 101J
L111	EO-345881	COIL FIX 1 EL0606SKI 101J
TR101	ET-397160J	TR 2SC3330 R,S,T,U,V
TR102	ET-397160J	TR 2SC3330 R,S,T,U,V
TR103	ET-354415	TR DTA144ES
TR104	ET-354414	TR DTC144ES
TR105	ET-397160J	TR 2SC3330 R,S,T,U,V

10. CANAL PLUS (A) P.C BOARD

Ref.No.	Part No.	Description
D101	ED-388358J	D ZENER H HZS5C2
D103	ED-307572	D SILICON H 1SS131
D104	ED-307572	D SILICON H 1SS131
D105	ED-307572	D SILICON H 1SS131
D106	ED-404468J	D ZENER H HZS11C3 T26
IC101	EI-408959J	IC LA7200
IC102	EI-408959J	IC LA7200
IC103	EI-408959J	IC LA7200
IC104	EI-408959J	IC LA7200
IC105	EI-332259	IC TC4052BP
IC106	EI-408964J	IC LA7954
IC107	EI-408959J	IC LA7200
IC108	EI-408961J	IC MM1031XS
IC201	EI-386468J	IC BA3308
L101	EO-345880	COIL FIX 1 EL0606SKI 820J
L102	EO-345880	COIL FIX 1 EL0606SKI 820J
L103	EO-345880	COIL FIX 1 EL0606SKI 820J
L104	EO-345880	COIL FIX 1 EL0606SKI 820J
L105	EO-345880	COIL FIX 1 EL0606SKI 820J
TR101	ET-397160J	TR 2SC3330 R,S,T,U,V
TR102	ET-397160J	TR 2SC3330 R,S,T,U,V
TR103	ET-397160J	TR 2SC3330 R,S,T,U,V
TR104	ET-397160J	TR 2SC3330 R,S,T,U,V
TR105	ET-397160J	TR 2SC3330 R,S,T,U,V
TR106	ET-397160J	TR 2SC3330 R,S,T,U,V
TR110	ET-397160J	TR 2SC3330 R,S,T,U,V
TR111	ET-397160J	TR 2SC3330 R,S,T,U,V
TR112	ET-353899	TR 2SA1317 S,T,U
TR115	ET-370310	TR DTC144TS
TR116	ET-370310	TR DTC144TS
TR117	ET-354414	TR DTC144ES
TR118	ET-370310	TR DTC144TS
TR119	ET-370310	TR DTC144TS
TR120	ET-397160J	TR 2SC3330 R,S,T,U,V
TR121	ET-397160J	TR 2SC3330 R,S,T,U,V
TR123	ET-354414	TR DTC144ES
TR124	ET-354414	TR DTC144ES
TR125	ET-354414	TR DTC144ES
TR126	ET-397160J	TR 2SC3330 R,S,T,U,V
TR127	ET-397160J	TR 2SC3330 R,S,T,U,V
TR128	ET-373985	TR DTA144TS
TR129	ET-373985	TR DTA144TS
TR130	ET-354414	TR DTC144ES
TR131	ET-373985	TR DTA144TS
TR132	ET-354414	TR DTC144ES
TR133	ET-354414	TR DTC144ES
TR134	ET-397160J	TR 2SC3330 R,S,T,U,V
TR135	ET-394881J	TR DTC114WS
TR136	ET-373985	TR DTA144TS
TR139	ET-397160J	TR 2SC3330 R,S,T,U,V

11. CANAL PLUS (B) P.C BOARD

Ref.No.	Part No.	Description
J1	EJ-389325J	PIN J YKB11-0179 1P
J2	EJ-389324J	PIN J YKB11-0178 1P
J3	EJ-389864J	SOCKET M1817 21P
J4	EJ-389915J	SOCKET M1817-A 21P
J5	EJ-389323J	PIN J YKB11-0180 1P
J6	EJ-389325J	PIN J YKB11-0179 1P
J7	EJ-389324J	PIN J YKB11-0178 1P
1	SP-404384J	PANEL REAR JACK EOG-V (2)

12. VIF UNIT (EOG,EOH-D(E),EOH-D(V))

Ref.No.	Part No.	Description
CF1	EH-730625J	FILTER CE SAF38.9MZW70Z
CF2	EH-368948	FILTER CE TPS5.5MW 5.5000MHZ
CF4	EH-732528J	FILTER SAW SAF33.4MC70Z
IC1	EI-729997J	IC LA7575
L1	EO-725824J	COIL TRAP 6F16185A1 [EOG,EOH-D(V)]
L2	EO-725825J	COIL TRAP 6F16186A1 [EOG,EOH-D(V)]
L3	EO-391141J	COIL FIX 1 EL0405SKI R47M [EOH-D(E)]
L4	EO-392817J	COIL FIX 1 EL0405SKI 1R2K
L6	EO-388160J	COIL FIX 1 EL0405SKI 1R8K
L7	EO-714614	COIL RF 6F16115B1
L8	EO-732656J	COIL OSC 6F16403B1
L9	EO-387781J	COIL FIX 1 EL0405SKI 120K
L10	EO-381196J	COIL FIX 1 EL0405SKI 470K
Q1	ET-725820J	TR CHIP 2SC2735J
Q2	ET-731437J	TR CHIP DTC114EK [EOG,EOH-D(V)]
Q3	ET-731437J	TR CHIP DTC114EK [EOG,EOH-D(V)]
Q6	ET-370819	TR.CHIP 2SC3052
VR1	EV-733235J	R S-FIX H VG068TLT 203
VR2	EV-733235J	R S-FIX H VG068TLT 203 [EOG,EOH-D(V)]

13. VIF UNIT (EK,EOH-N/DN)

Ref.No.	Part No.	Description
CF1A	EH-730625J	FILTER CE SAF38.9MZW70Z [EOH-N/DN]
CF1B	EH-714628	FILTER SAW SAF39.5MZ70Z [EK]
CF2A	EH-368948	FILTER CE TPS5.5MW 5.5000MHZ [EOH-N/DN]
CF2B	EH-373919	FILTER CE TPS6.0MB [EK]
CF3A	EH-394948J	FILTER CE SFT5.5MA [EOH-N/DN]
CF3B	EH-725829J	FILTER CE SFT6.0MA [EK]
CF4A	EH-732524J	FILTER SAW SAF33.0MDA70Z [EOH-N/DN]
CF4B	EH-725827J	FILTER CE SAF32.9MDE70Z [EK]
IC1	EI-729997J	IC LA7575
IC2	EI-397123J	IC TA8703S
L3A	EO-391141J	COIL FIX 1 EL0405SKI R47M [EOH-N]
L3B	EO-381187J	COIL FIX 1 EL0405SKI R68M [EK]
L4	EO-381188J	COIL FIX 1 EL0405SKI 1R0K
L5A	EO-725953J	COIL SIF DET 6F16263A2 [EOH-N/DN]
L5B	EO-725954J	COIL SIF DET 6F16263A3 [EK]
L7	EO-714614	COIL RF 6F16115B1
L8	EO-732656J	COIL OSC 6F16403B1
L9	EO-387781J	COIL FIX 1 EL0405SKI 120K
L10	EO-381196J	COIL FIX 1 EL0405SKI 470K
L11	EO-714610	COIL RF 6F16113B1
Q1	ET-725820J	TR CHIP 2SC2735J
Q5	ET-713614	TR CHIP 2SA1235 E,F
Q6	ET-370819	TR.CHIP 2SC3052
VR1	EV-733235J	R S-FIX H VG068TLT 203
VR3	EV-732502J	R S-FIX H RH0636C 103

14. PRE AMP P.C BOARD

Ref.No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D3	ED-307572	D SILICON H 1SS131
D15	ED-307572	D SILICON H 1SS131
FL201	EO-408439J	COIL OSC 1 125-8019-31 70.0KHZ
IC1	EI-387586J	IC BA7244BS
IC2	EI-356457	IC BU4013B
IC101	EI-397285J	IC BA7740S
L1	EO-410100J	COIL FIX 1 SPT0203SA T26 560J
L2	EO-410088J	COIL FIX 1 SPT0203SA T26 5R6J
L3	EO-381195J	COIL FIX 1 EL0405SKI 331K
L4	EO-410090J	COIL FIX 1 SPT0203SA T26 8R2J
L5	EO-410094J	COIL FIX 1 SPT0203SA T26 180J
L6	EO-381193J	COIL FIX 1 EL0405SKI 271K
L7	EO-410102J	COIL FIX 1 SPT0203SA T26 820J
L8	EO-345881	COIL FIX 1 EL0606SKI 101J
L9	EO-410096J	COIL FIX 1 SPT0203SA T26 220J
L10	EO-345881	COIL FIX 1 EL0606SKI 101J
L11	EO-345881	COIL FIX 1 EL0606SKI 101J
L12	EO-410103J	COIL FIX 1 SPT0203SA T26 151J
L13	EO-410101J	COIL FIX 1 SPT0203SA T26 680J
L14	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L15	EO-388087J	COIL FIX 1 LF-5.0S F05 331K
L101	EO-403270J	COIL FIX 1 EL0405RA T05 101J
L102	EO-403270J	COIL FIX 1 EL0405RA T05 101J
L150	EO-381189J	COIL FIX 1 EL0405SKI 100K
L151	EO-410093J	COIL FIX 1 SPT0203SA T26 150J
L201	EO-390716J	COIL FIX 1 LHL06TB T05 272J
PS1	EJ-389815J	SOCKET HOUSING 5062-30-10-15
TH1	EX-405691J	THERMISTOR NTH5D332KA
TR1	ET-354414	TR DTC144ES
TR2	ET-353899	TR 2SA1317 S,T,U
TR3	ET-397160J	TR 2SC3330 R,S,T,U,V
TR4	ET-397160J	TR 2SC3330 R,S,T,U,V
TR5	ET-397160J	TR 2SC3330 R,S,T,U,V
TR6	ET-397160J	TR 2SC3330 R,S,T,U,V
TR7	ET-397160J	TR 2SC3330 R,S,T,U,V
TR8	ET-353897	TR DTC114ES
TR9	ET-364040	TR UN421D
TR10	ET-354414	TR DTC144ES [EOG,EOH]
TR11	ET-360399	TR DTC114TS [EOG,EOH]
TR12	ET-354364	TR DTC143TS
TR13	ET-354414	TR DTC144ES
TR14	ET-397160J	TR 2SC3330 R,S,T,U,V
TR15	ET-397160J	TR 2SC3330 R,S,T,U,V
TR16	ET-353899	TR 2SA1317 S,T,U
TR17	ET-353899	TR 2SA1317 S,T,U
TR18	ET-360399	TR DTC114TS
TR19	ET-364040	TR UN421D
TR20	ET-364040	TR UN421D
TR21	ET-360399	TR DTC114TS
TR103	ET-354414	TR DTC144ES
TR150	ET-353899	TR 2SA1317 S,T,U
TR151	ET-353899	TR 2SA1317 S,T,U
TR152	ET-353899	TR 2SA1317 S,T,U
TR201	ET-397160J	TR 2SC3330 R,S,T,U,V
VR1	EV-390157J	R S-FIX V KVSF639A 0.10W 102
VR2	EV-403919J	R S-FIX V KVSF639A 0.10W 681
WP1	EW-389317J	CORD FFC P1.25 L=180 15P

15. OPERATION (1) P.C BOARD

Ref.No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D2	ED-307572	D SILICON H 1SS131 [EK]
D3	ED-307572	D SILICON H 1SS131
D5	ED-307572	D SILICON H 1SS131 [EOG]
D6	ED-307572	D SILICON H 1SS131 [EOG]
D7	ED-307572	D SILICON H 1SS131 [EOG]
D9	ED-307572	D SILICON H 1SS131 [EK,EOH-DN/N]
D10	ED-307572	D SILICON H 1SS131 [EK]
D12	ED-307572	D SILICON H 1SS131
D13	ED-307572	D SILICON H 1SS131
D14	ED-307572	D SILICON H 1SS131 [EOG,EOH-D]
D16	ED-307572	D SILICON H 1SS131
D17	ED-307572	D SILICON H 1SS131
D18	ED-307572	D SILICON H 1SS131
D19	ED-307572	D SILICON H 1SS131
D20	ED-307572	D SILICON H 1SS131
D21	ED-307572	D SILICON H 1SS131
FL1	EM-408445J	IND FL FV548G CHARACTER
IB1	EH-383119J	COMP R RGLE4X 473J
IB2	EH-397361J	COMP R RGLD7X473J
IC1A	EI-411969J	IC M38173M6-222FP JTXOPD1 [EK]
IC1B	EI-411970J1	IC M38173M6-224FP JTXOPP2 [EOG,EOH]
L1	EO-354600	COIL FIX 1 LAP02 F05 101K
PH1	ET-408988J	DETECTOR SBX1619-52
P8	EJ-410424J	SOCKET 52030-2610 26P
PS1	EJ-404372J	SOCKET HOUSING 5062-30-10-20
PS2	EJ-404364J	SOCKET HOUSING 5062-30-10-17
SW1	ES-409007J	SW TACT HKW0606-01-500
SW2	ES-409007J	SW TACT HKW0606-01-500
SW5	ES-409007J	SW TACT HKW0606-01-500
SW6	ES-409007J	SW TACT HKW0606-01-500
SW7	ES-409007J	SW TACT HKW0606-01-500
SW8	ES-409007J	SW TACT HKW0606-01-500
SW9	ES-409007J	SW TACT HKW0606-01-500
SW10	ES-409007J	SW TACT HKW0606-01-500
SW11	ES-409007J	SW TACT HKW0606-01-500
SW12	ES-409007J	SW TACT HKW0606-01-500
SW13	ES-409007J	SW TACT HKW0606-01-500
SW14	ES-409007J	SW TACT HKW0606-01-500
TR1	ET-354414	TR DTC144ES
TR2	ET-364060	TR DTC143ES
TR3	ET-408826J	TR DTC143EL T05
TR4	ET-408826J	TR DTC143EL T05
TR5	ET-408826J	TR DTC143EL T05
TR6	ET-408826J	TR DTC143EL T05
TR7	ET-408826J	TR DTC143EL T05
TR8	ET-364060	TR DTC143ES
WP1	EW-404366J	CORD FFC P1.25 L=380 20P
WP3	EW-404367J	CORD FFC P1.25 L=120 17P
X1	EI-368825M	OSC X'TAL C-002RX 32.768KHZ
X2	EI-405327J	OSC CE CST6.00MGW 6.000MHZ

16. OPERATION (2) P.C BOARD

Ref.No.	Part No.	Description
D4	ED-307572	D SILICON H 1SS131
D6	ED-307572	D SILICON H 1SS131
D7	ED-307572	D SILICON H 1SS131
D9	ED-307572	D SILICON H 1SS131 [EOG]
D10	ED-307572	D SILICON H 1SS131 [EOH]
D12	ED-307572	D SILICON H 1SS131 [EK,EOH-DN/N]
D13	ED-307572	D SILICON H 1SS131
D15	ED-307572	D SILICON H 1SS131
D16	ED-307572	D SILICON H 1SS131
D17	ED-307572	D SILICON H 1SS131
D18	ED-307572	D SILICON H 1SS131
D19	ED-307572	D SILICON H 1SS131
D21	ED-307572	D SILICON H 1SS131
D22	ED-307572	D SILICON H 1SS131
D23	ED-307572	D SILICON H 1SS131
D24	ED-307572	D SILICON H 1SS131
P5	EJ-404365J	SOCKET 6200-267-012-800 26P
SW1	ES-409007J	SW TACT HKW0606-01-500
SW2	ES-409007J	SW TACT HKW0606-01-500
SW3	ES-409007J	SW TACT HKW0606-01-500
SW4	ES-409007J	SW TACT HKW0606-01-500
SW5	ES-409007J	SW TACT HKW0606-01-500
SW6	ES-409007J	SW TACT HKW0606-01-500
SW7	ES-409007J	SW TACT HKW0606-01-500
SW8	ES-409007J	SW TACT HKW0606-01-500
SW9	ES-391710J	SW LEAF SPPB51 01-1 NO
SW10	ES-397339J	SW SLIDE ESD-170252
SW11	ES-397339J	SW SLIDE ESD-170252 [EOG,EOH]
SW12	ES-397339J	SW SLIDE ESD-170252
SW13	ES-397339J	SW SLIDE ESD-170252 [EK,EOH-DN/N]
SW14	ES-397339J	SW SLIDE ESD-170252
TR2	ET-408827J	TR DTA114TL T05
TR4	ET-408827J	TR DTA114TL T05

17. FRONT P.C BOARD

Ref.No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D2	ED-307572	D SILICON H 1SS131
L1	EO-354600	COIL FIX 1 LAP02 F05 101K
PJ1	EJ-387623J	PIN J JPJ5022-01-040 1P
PJ2	EJ-396453J	PIN J JPJ5022-01-030 1P
PJ3	EJ-396452J	PIN J JPJ5022-01-020 1P
PJ4	EJ-410383J	PHONE J 2P HSJ1406-01-010 3.5
TR1	ET-397160J	TR 2SC3330 R,S,T,U,V

18. VR P.C BOARD

Ref.No.	Part No.	Description
VR3	EV-401032J	VR SLIDE RS30B221J K203X2NO CL

19. POWER SUPPLY (1) P.C BOARD

Ref.No.	Part No.	Description
C1	EC-410495J	C EC V CUT TWSS 682M 16.0DC
C2	EC-410496J	C EC V CUT TWSS 332M 35.0DC
C3	EC-410497J	C EC V CUT TWSS 222M 25.0DC
C4	EC-410065J	C EC V T05 TWSS 330M 63.0DC
C5	EC-410498J	C EC V CUT TWSS 101M 63.0DC
D1	*ED-511907	D SILICON 1N4002 100/1.0A
D2	*ED-511907	D SILICON 1N4002 100/1.0A
D3	*ED-511907	D SILICON 1N4002 100/1.0A
D4	*ED-511907	D SILICON 1N4002 100/1.0A
D5	*ED-412107J	D SILICON 1N4003 T26 200/1.0A
D6	*ED-412107J	D SILICON 1N4003 T26 200/1.0A
D7	*ED-307572	D SILICON H 1SS131
D8	*ED-412008J	D ZENER H HZS33-1L T26
D9	*ED-408719J	D ZENER H HZS4C2
D10	*ED-387762J	D ZENER H HZS36-3L
D11	*ED-307572	D SILICON H 1SS131
D13	ED-307572	D SILICON H 1SS131
D14	*ED-307572	D SILICON H 1SS131
D15	*ED-307572	D SILICON H 1SS131
F1	*EF-601964	FUSE SEMKO T 250V 1.60A
F2	*EF-601301	FUSE SEMKO T 250V 2.00A
F3	*EF-601964	FUSE SEMKO T 250V 1.60A
FR4	*ER-400605J	R FUSE V T05 ERD2FCV 1/4W 15R0G
IC1	*EI-400756J	IC NJM4558L-B
L1	*EO-395035J	COIL LF PLH11C-1811R2 [EOG]
L2	*EO-339907	COIL LF FKOB160MH16 1000.0UH [EOG]
TR1	*ET-373210	TR 2SB1187 E,F
TR2	*ET-405622J	TR 2SD2061 E,F
TR3	*ET-404498J	TR 2SB1306 Q,R T05
TR4	*ET-373391	TR DTC143ZS
TR5	*ET-404498J	TR 2SB1306 Q,R T05
TR6	*ET-373391	TR DTC143ZS
TR7	*ET-405622J	TR 2SD2061 E,F

20. POWER SUPPLY (2) P.C BOARD

Ref.No.	Part No.	Description
D16	*ED-307572	D SILICON H 1SS131
D17	*ED-307572	D SILICON H 1SS131
D18	*ED-410368J	D ZENER H HZS15-3 T26
D19	*ED-394708J	D SILICON RBA402 200/4.0A
TR8	*ET-405622J	TR 2SD2061 E,F
TR9	*ET-373025	TR 2SD1944 J1,J2,K
TR10	*ET-405622J	TR 2SD2061 E,F

21. NICAM P.C BOARD (EK,EOH-DN/N)

Ref.No.	Part No.	Description
D1	ED-394936J	D VARACTOR 1SV111
D2	ED-307572	D SILICON H 1SS131
D3	ED-394936J	D VARACTOR 1SV111
D4	ED-394936J	D VARACTOR 1SV111
D5	ED-404254J	D ZENER H HZS2B3 T26
D6	ED-307572	D SILICON H 1SS131
IC1	EI-408930J	IC TDA8732
IC2	EI-394937J	IC CF70124
IC3	EI-397560J	IC SAA7322GP
IC4	EI-393323J	IC M5218AL-771
L1	EO-345881	COIL FIX 1 EL0606SKI 101J
L2	EO-384903J	COIL FIX 1 EL0405SKI 102K
L3	EO-384903J	COIL FIX 1 EL0405SKI 102K
L5	EO-345881	COIL FIX 1 EL0606SKI 101J
L6	EO-345881	COIL FIX 1 EL0606SKI 101J
L7	EO-345881	COIL FIX 1 EL0606SKI 101J
L8	EO-345881	COIL FIX 1 EL0606SKI 101J
L10	EO-345881	COIL FIX 1 EL0606SKI 101J
T1A	EH-382829J	FILTER LC BP TH316BQM-2110QDAF [EK]
T1B	EH-397511J	FILTER LC BP TH316BQKS-2982QDD [EOH-DN/N]

Ref.No.	Part No.	Description
TR1	ET-397160J	TR 2SC3330 R,S,T,U,V
TR3	ET-397160J	TR 2SC3330 R,S,T,U,V
TR5	ET-370310	TR DTC144TS
TR6	ET-360399	TR DTC114TS
TR7	ET-360399	TR DTC114TS
TR8	ET-370310	TR DTC144TS
TR9	ET-373985	TR DTA144TS
TR10	ET-370310	TR DTC144TS [EOH-DN]
TR11	ET-370310	TR DTC144TS
TR12	ET-354414	TR DTC144ES
VC2	EC-397180J	C S-FIX H T05 VCT51C 3.0-10
X1A	EI-408931J	OSC X'TAL HC-49/U 13104KHZ [EK]
X1B	EI-408932J	OSC X'TAL HC-49/U 11700KHZ [EOH-DN/N]
X2	EI-408933J	OSC X'TAL HC-49/U 11648KHZ
X3	EI-403347J	OSC X'TAL NR-18-S 16.384MHZ

22. DN-MULTI P.C BOARD (EOH-DN ONLY)

Ref.No.	Part No.	Description
D101	ED-364032	D ZENER H HZS10B2J
FL101	EH-394947J	FILTER CE SFT5.74MA
FL102	EH-394948J	FILTER CE SFT5.5MA
FR122	*ER-331619	R FUSE H S10 ERD2FC 1/4W 39R0G
IC101	EI-394949J	IC IR3P72
L101	EO-345881	COIL FIX 1 EL0606SKI 101J
T101	EO-396464J	COIL DET 1 134-5177
T102	EO-394950J	COIL DET 1 134-5176
VR101	EV-404298J	R S-FIX H T05 KVSF637T 0.1W222
VR102	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223
VR103	EV-397570J	R S-FIX H T05 RH0638C 0.1W 105
VR104	EV-404303J	R S-FIX H T05 KVSF637T 0.1W474
VR105	EV-404295J	R S-FIX H T05 KVSF637T 0.1W104
VR106	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223
VR107	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223

23. D-MULTI P.C BOARD (EOG,EOH-D)

Ref.No.	Part No.	Description
D1	ED-364032	D ZENER H HZS10B2J
FL1	EH-394947J	FILTER CE SFT5.74MA
FL2	EH-394948J	FILTER CE SFT5.5MA
FR22	*ER-331619	R FUSE H S10 ERD2FC 1/4W 39R0G
IC1	EI-394949J	IC IR3P72
L1	EO-345881	COIL FIX 1 EL0606SKI 101J
T1	EO-396464J	COIL DET 1 134-5177
T2	EO-394950J	COIL DET 1 134-5176
VR1	EV-404298J	R S-FIX H T05 KVSF637T 0.1W222
VR2	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223
VR3	EV-397570J	R S-FIX H T05 RH0638C 0.1W 105
VR4	EV-404303J	R S-FIX H T05 KVSF637T 0.1W474
VR5	EV-404295J	R S-FIX H T05 KVSF637T 0.1W104
VR6	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223
VR7	EV-405658J	R S-FIX H T05 KVSF637T 0.1W223

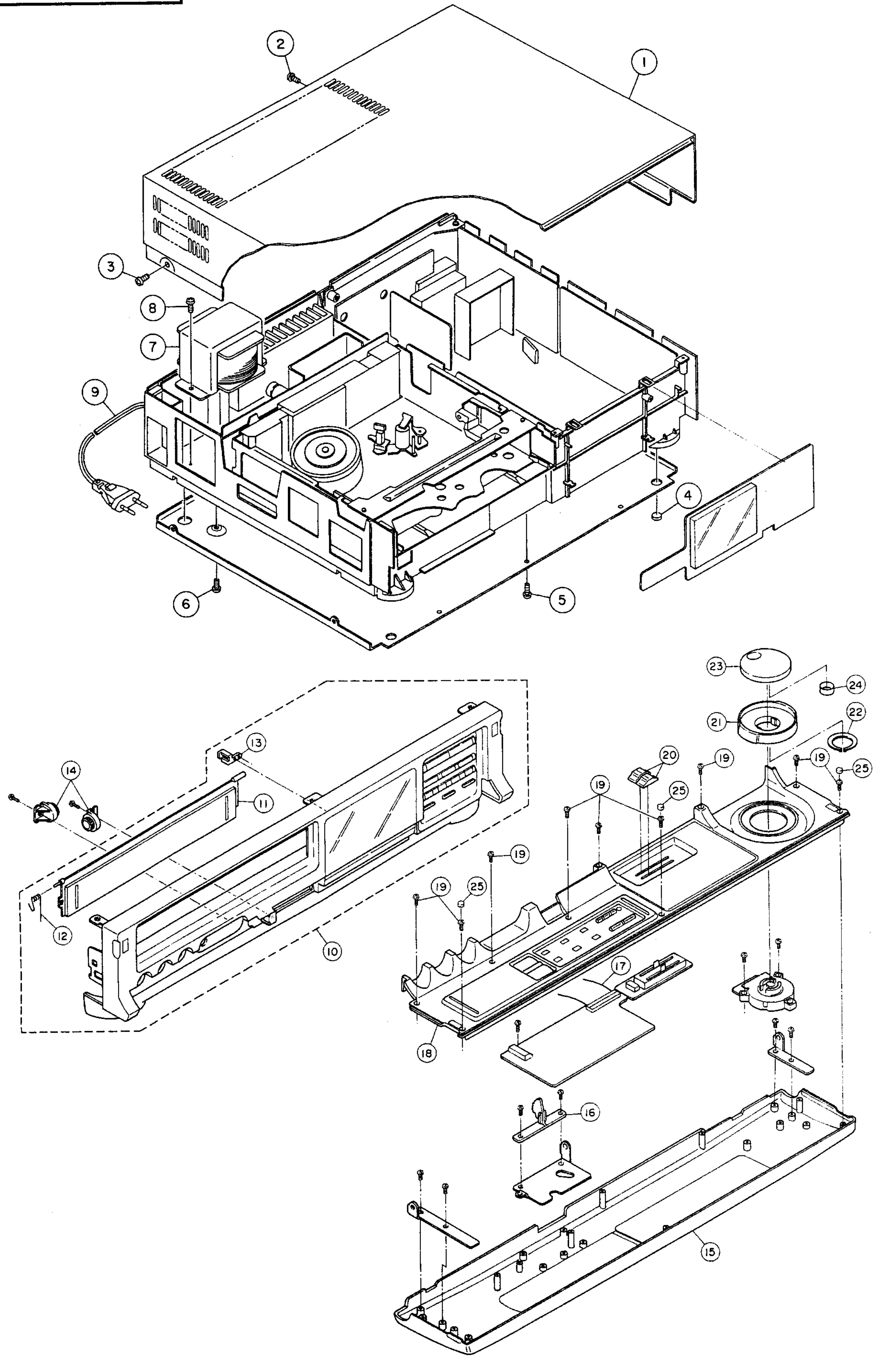
24. PDC/VPST P.C BOARD

Ref.No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D101	ED-307572	D SILICON H 1SS131
D201	ED-307572	D SILICON H 1SS131
FL101	EH-394684J	FILTER EMI ZBF503D-00TA T05
IB101	EH-383056J	COMP R RGLE4X 103J
IB102	EH-386637J	COMP R RGLE8X 103J
IC101	EI-408432J	IC UPD75218CW-012 JXVPT1
IC102	EI-410265J	IC ST24C04
IC103	EI-405224J	IC ST24C02
IC104	EI-408434J	IC MV1815-1BA
IC105	EI-410125J	IC V53C464AP-80
IC106	EI-401050J	IC LVA523SA2
IC107	EI-394680J	IC AN3171K
IC108	EI-387019J	IC MC1377P
IC301	EI-385958J	IC SAA4700 [EOG]
L1	EO-345865	COIL FIX 1 EL0606SKI 100J
L101	EO-345865	COIL FIX 1 EL0606SKI 100J
L102	EO-345865	COIL FIX 1 EL0606SKI 100J
L121	EO-345865	COIL FIX 1 EL0606SKI 100J
L151	EO-410104J	COIL FIX 1 SPT0203SA T26 181J
L152	EO-410104J	COIL FIX 1 SPT0203SA T26 181J
L153	EO-345994	COIL FIX 1 EL0606RA T05 820J
L154	EO-410099J	COIL FIX 1 SPT0203SA T26 470J
L155	EO-345865	COIL FIX 1 EL0606SKI 100J
L201	EO-345865	COIL FIX 1 EL0606SKI 100J
L202	EO-345865	COIL FIX 1 EL0606SKI 100J
L203	EO-345989	COIL FIX 1 EL0606RA T05 390J
L204	EO-345873	COIL FIX 1 EL0606SKI 270J
L206	EO-345871	COIL FIX 1 EL0606SKI 180J
L207	EO-345874	COIL FIX 1 EL0606SKI 330J
L208	EO-345874	COIL FIX 1 EL0606SKI 330J
L251	EO-345865	COIL FIX 1 EL0606SKI 100J
L301	EO-345865	COIL FIX 1 EL0606SKI 100J
TR1	ET-397160J	TR 2SC3330 R,S,T,U,V
TR2	ET-388338J	TR 2SB1425 S,E
TR3	ET-354414	TR DTC144ES
TR101	ET-354415	TR DTA144ES
TR102	ET-397160J	TR 2SC3330 R,S,T,U,V
TR103	ET-364060	TR DTC143ES [EOG]
TR104	ET-354414	TR DTC144ES [EOG]
TR105	ET-388338J	TR 2SB1425 S,E [EOG]
TR151	ET-397160J	TR 2SC3330 R,S,T,U,V
TR152	ET-353899	TR 2SA1317 S,T,U
TR153	ET-353899	TR 2SA1317 S,T,U
TR154	ET-397160J	TR 2SC3330 R,S,T,U,V
TR155	ET-397160J	TR 2SC3330 R,S,T,U,V
TR201	ET-397160J	TR 2SC3330 R,S,T,U,V
TR202	ET-397160J	TR 2SC3330 R,S,T,U,V
TR203	ET-397160J	TR 2SC3330 R,S,T,U,V
TR204	ET-353899	TR 2SA1317 S,T,U
TR208	ET-353899	TR 2SA1317 S,T,U
TR251	ET-397160J	TR 2SC3330 R,S,T,U,V
TR252	ET-353899	TR 2SA1317 S,T,U
TR253	ET-353899	TR 2SA1317 S,T,U
X101	EI-373957J1	OSC CE CST4.19MGW 4.194MHZ
X102	EI-408433J	OSC X'TAL HC-43/U 27750KHZ
X103	EI-394673J	OSC X'TAL HC-49/U 8867.238KHZ

25. JOG SHUTTLE P.C BOARD

Ref.No.	Part No.	Description
SW3	ES-409005J	SW ROTARY ENCODER SRGPPJ-1

FINAL ASSEMBLY BLOCK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26. FINAL ASSEMBLY

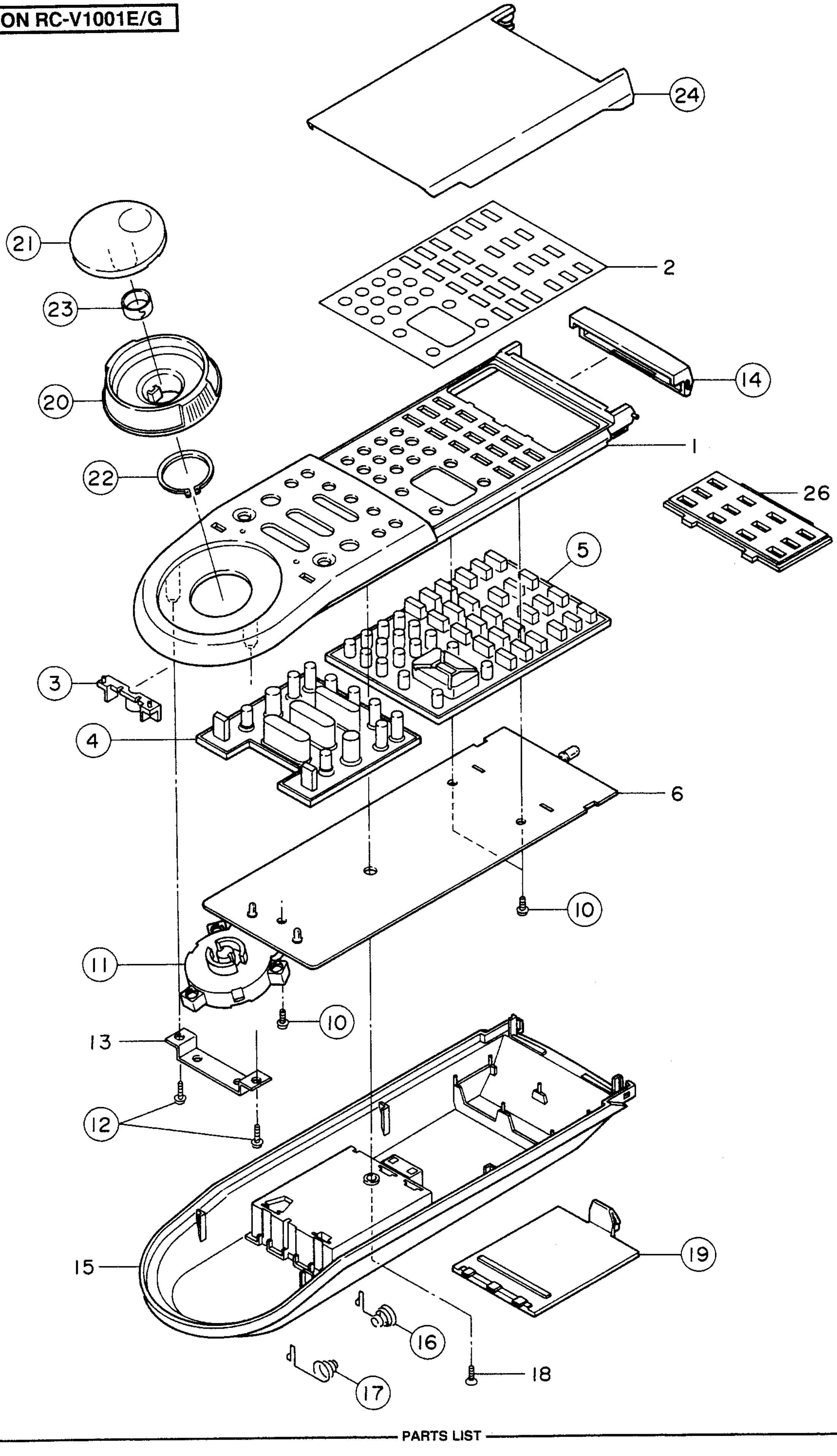
Ref.No.	Part No.	Description
1	SP-409486J	COVER UPPER (JT)
2	ZS-365702	PLX BID30X10STL BNI
3	ZS-361507	DT BID30X06STL BNI
4	SA-395476J	FOOT FRONT
5	ZS-362378	PLX BID30X10STL CMT
6	ZS-358936	ST BID30X06STL CMT
7A	*BT-408920J	TRANS POW V1154 EA [EK]
7B	*BT-408921J	TRANS POW V1154 EOG [EOG]
7C	*BT-408922J	TRANS POW V1154 EOH [EOH]
8	ZS-373962	PLX BID40X10STL CMT
9A	*EW-404001M	AC CORD 200 VCTFK WITH TUBE B [EK]
9B	*EW-404002M	AC CORD 200 SE-1 WITH TUBE E [EOG,EOH]
10A	BD-409401J	PANEL FRONT E1 PART [EK,EOH]
10B	BD-409402J	PANEL FRONT G1 PART [EOG]
11A	SE-409419J	MASK CASSETTE (D) E3 [EK,EOH]
11B	SE-409425J	MASK CASSETTE (D) G5 [EOG]
12	ZG-395386J	SP MASK (2)
13	SZ-409420J	STOPPER MASK (3)
14	SZ-409014J	DAMPER 3F96-F
15A	SP-409433J	DOOR (A) F1000 E PART [EK]
15B	SP-409439J	DOOR (A) F1000 G PART [EOG]
15C	SP-409427J	DOOR (A) F1010 E1 PART [EOH-D]
Q5D	SP-409435J	DOOR (A) F1010 E2 PART [EOH-N]
15E	SP-409437J	DOOR (A) F1030 E PART [EOH-DN]
16	SZ-409447J	GEAR DAMPER
17	EW-409012J	CORD FFC P1.00 L=100 26P
18A	SP-409456J	DOOR (C) E2 PART [EK]
18B	SP-409467J	DOOR (C) G1 PART [EOG]
18C	SP-409460J	DOOR (C) E3 PART [EOH-D]
18D	SP-409462J	DOOR (C) E4 PART [EOH-N]
18E	SP-409464J	DOOR (C) E5 PART [EOH-DN]
19	ZS-409503J	BT BID20X08STL BZN
20	SK-395423J	KNOB VOL (1)
21	SK-409478J	KNOB SHUTTLE
22	SZ-408436J	RING C S-19
23	SK-409479J	KNOB JOG
24	SZ-408435J	COMPRESSION RING 10193
25	SZ-409480J	STOPPER DOOR

NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

27. ACCESSARY

Ref.No.	Part No.	Description
1	EW-348414	CORD PAL
2A	AV-B1040A010G	REMOCON BLK RC-V1001E [EK]
2B	AV-B1040A010H	REMOCON BLK RC-V1001G [EOG]
2C	AV-B1043A010G	REMOCON BLK RC-V1002E [EOH]

REMOCON RC-V1001E/G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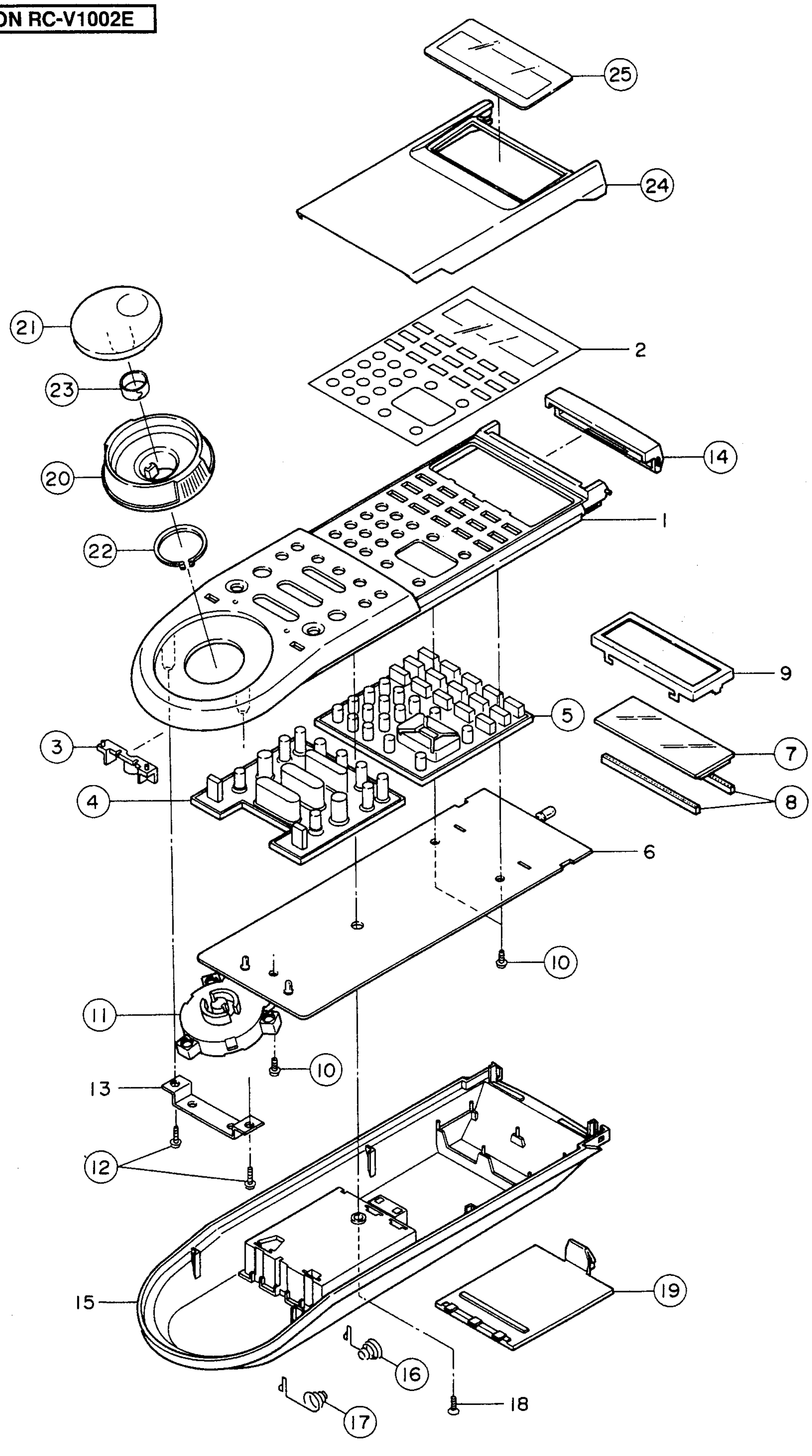
28. REMOCON RC-V1001E/V1001G

Ref.No.	Part No.	Description
3	SE-407612J	LENS (V)
4	MB-407645J	KEY RUBBER (V1)
5	MB-407622J	KEY RUBBER (V2)-A
10	ZS-374389	PT BID20X06STL BNI
11	ES-408428J	SW ROTARY ENCODER SRGPPJ
12	ZS-336614	PT PAN26X08STL CMT
14	SE-407625J	FILTER (V)
16	ZG-407614J	TERMINAL BATTERY (V3)
17	ZG-407615J	TERMINAL BATTERY (V4)
19	SC-407627J	COVER BATTERY (V)
20	SK-407713J	KNOB RING-R
21	SK-407708J	KNOB JOG
22	SZ-408436J	RING C S-19
23	SZ-408435J	COMPRESSION RING 10193
24A	SP-407635J	DOOR PANEL (V)-1001E [RC-V1001E]
24B	SP-407634J	DOOR PANEL (V)-1001G [RC-V1001G]

29. REMOCON P.C BOARD RC-V1001

Ref.No.	Part No.	Description
D1	ED-403450J	D LED SE303ARF-C INFRARED
D2	ED-397391J	D LED BR3668S RED
D3	ED-397391J	D LED BR3668S RED
IC1	EI-408449J	IC UPD75004GB-771 JXVPTR1 QF
IC2	EI-400672J	IC S-8052ALB-LE
TR1	ET-405342J	TR.CHIP 2SD1620
X1	EI-408450J	OSC CE CST2.45MGW 2.450MHZ
1	ZG-407616J	TERMINAL BATTERY (V1)
2	ZG-407617J	TERMINAL BATTERY (V2)

REMOCON RC-V1002E



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30. REMOCON RC-V1002E

Ref.No.	Part No.	Description
3	SE-407612J	LENS (V)
4	MB-407645J	KEY RUBBER (V1)
5	MB-407618J	KEY RUBBER (W)-A
7	EM-408437J	IND LCD LD-B5444A ENGLISH
8	EJ-408427J	CONNECTOR LCD (4) B1043
10	ZS-374389	PT BID20X06STL BNI
11	ES-408428J	SW ROTARY ENCODER SRGPPJ
12	ZS-336614	PT PAN26X08STL CMT
14	SE-407625J	FILTER (V)
16	ZG-407614J	TERMINAL BATTERY (V3)
17	ZG-407615J	TERMINAL BATTERY (V4)
19	SC-407627J	COVER BATTERY (V)
20	SK-407713J	KNOB RING-R
21	SK-407708J	KNOB JOG
22	SZ-408436J	RING C S-19
23	SZ-408435J	COMPRESSION RING 10193
24	SP-407642J	DOOR PANEL (W)-1002E
25	SE-407613J	WINDOW DOOR (W)

31. REMOCON P.C BOARD RC-V1002

Ref.No.	Part No.	Description
D1	ED-403450J	D LED SE303ARF-C INFRARED
D2	ED-397391J	D LED BR3668S RED
D3	ED-397391J	D LED BR3668S RED
D4	ED-386031J	D SILICON CHIP MA110-TW
D5	ED-386031J	D SILICON CHIP MA110-TW
D6	ED-386031J	D SILICON CHIP MA110-TW
D7	ED-386031J	D SILICON CHIP MA110-TW
D8	ED-386031J	D SILICON CHIP MA110-TW
D9	ED-386031J	D SILICON CHIP MA110-TW
D10	ED-386031J	D SILICON CHIP MA110-TW
D11	ED-386031J	D SILICON CHIP MA110-TW
IC1	EI-408408J1	IC M50933-128FP JXLCDR2
IC2	EI-400672J	IC S-8052ALB-LE
SW1	ES-393431J	SW TACT CHIP SKHUAB T12E
TR1	ET-405342J	TR.CHIP 2SD1620
X1	EI-368825M	OSC X'TAL C-002RX 32.768KHZ
X2	EI-403451J	OSC CE CSB1200J 1.200MHZ
1	ZG-407616J	TERMINAL BATTERY (V1)
2	ZG-407617J	TERMINAL BATTERY (V2)

INDEX

Part No.	Ref. No.
AVB1040A010G	27-2A
AVB1040A010H	27-2B
AVB1043A010G	27-2C
BAV1154A500A	5-5A
BAV1154A500B	5-5B
BAV1154A600A	5-1A
BAV1154A600B	5-1B
BAV1154A600D	5-1C
BAV1154A600E	5-1D
BAV1154A600F	5-1E
BAV1154A600H	5-1F
BAV1154A610A	5-2A
BAV1154A610B	5-2B
BAV1154A620A	5-3A
BAV1154A620B	5-3B
BAV1154A620D	5-3C
BAV1154A620E	5-3D
BAV1154A630A	5-4A
BAV1154A630B	5-4B
BAV1154A630D	5-4C
BAV1154A630E	5-4D
BAV1154A650A	5-6A
BAV1154A650B	5-6C
BAV1154A650C	5-6B
BAV1154A660A	5-7
BAV1154A690A	5-9
BAV1154A720A	5-8A
BAV1154A720C	5-8B
BBV1130A020F	3-70
BD409401J	26-10A
BD409402J	26-10B
BLV1102A140A	3-43
BLV1123A050A	3-23
BL387458J2	4-37
BM387503J	4-31
BM400682J1	4-9
BM401296J1	2-8
BT408920J	26-7A
BT408921J	26-7B
BT408922J	26-7C
BVV1102A070A	3-35
BVV1102A080A	3-36
BVV1102A150A	3-48
BVV1123A410E	2-1
BVV1123A420F	2-2
BV390051J	6-MD1A
BV403409J	6-MD1B
BV408937J	6-IF1A
BV408938J	6-IF1B
BV408940J	6-IF1C
BV408941J	6-IF1D
EA404543J	4-12
EC391843J	6-C110
EC394757J	6-VC501
EC397180J	21-VC2
EC410065J	19-C4
EC410495J	19-C1
EC410496J	19-C2
EC410497J	19-C3
EC410498J	19-C5
ED307572	6-D1
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ED389686J	6-D210
ED390011J	4-13
ED394708J	20-D19
ED394936J	21-D1
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ED394968J	6-D7
ED396065J	6-D112
ED397391J	29-D2
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ED397399J	6-D102
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ED400166J	6-D211
ED400174J	20-D18
ED403450J	29-D1
ED403450J	31-D1
ED403743J	6-D110
ED404254J	21-D5
ED404388J	6-D107
ED404468J	10-D106
ED408719J	19-D9
ED408830J	20-D17
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ED412008J	19-D8
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EE387604J2	6-TU1B
EE387607J1	6-TU1A
EE389626J1	6-TU1D
EE390143J2	6-TU1C
EF601301	19-F2
EF601964	19-F1
EF601964	19-F3
EH364045	7-FL800
EH366894	7-FL870
EH368948	12-CF2
EH368948	13-CF2A
EH373919	13-CF2B
EH378541J	6-IB300
EH378541J	6-IB301
EH378541J	6-IB302
EH382829J	21-T1A
EH383056J	24-IB101
EH383119J	15-IB1
EH386637J	24-IB102
EH394684J	24-FL101
EH394858J	7-FL770
EH394947J	22-FL101
EH394947J	23-FL1
EH394948J	13-CF3A
EH394948J	22-FL102
EH394948J	23-FL2
EH394984J	6-FL300
EH397361J	15-IB2
EH397511J	21-T1B
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EH725827J	13-CF4B
EH725829J	13-CF3B
EH730625J	12-CF1
EH730625J	13-CF1A
EH732524J	13-CF4A
EH732528J	12-CF4
EI201940	7-IC701
EI332259	10-IC105
EI356457	14-IC2
EI364896	6-IC301
EI366892	7-IC870
EI368825M	15-X1
EI368825M	31-X1
EI373955	6-IC405
EI373957J1	24-X101
EI373981J1	6-IC404
EI373981J1	7-IC880
EI381632J	7-X800
EI385958J	24-IC301
EI386468J	9-IC105

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
EI386468J	10-IC201	EJ389324J	8-PJ2	EO345989	24-L203	EO410102J	14-L7
EI387019J	24-IC108	EJ389324J	8-PJ3	EO345994	24-L153	EO410103J	7-L608
EI387586J	14-IC1	EJ389324J	11-J2	EO351866	6-L202	EO410103J	14-L12
EI388360J	6-IC200	EJ389324J	11-J7	EO351866	6-L502	EO410104J	24-L151
EI389622J	6-IC2	EJ389325J	8-PJ4	EO351866	6-L504	EO410104J	24-L152
EI389640J	6-X401	EJ389325J	8-PJ5	EO351868	7-L609	EO478181	7-L870
EI389974J	6-X501	EJ389325J	11-J1	EO351868	7-L811	EO714610	13-L11
EI390053J	6-IC1	EJ389325J	11-J6	EO351869	6-L2	EO714614	12-L7
EI393323J	21-IC4	EJ389815J	14-PS1	EO351869	7-L881	EO714614	13-L7
EI394673J	24-X103	EJ389864J	8-PJ8	EO353900	7-L806	EO725824J	12-L1
EI394680J	24-IC107	EJ389864J	8-PJ9	EO354600	6-L200	EO725825J	12-L2
EI394839J	7-IC800	EJ389864J	11-J3	EO354600	6-L203	EO725953J	13-L5A
EI394856J	7-IC770	EJ389915J	11-J4	EO354600	6-L300	EO725954J	13-L5B
EI394861J	9-IC106	EJ396452J	17-PJ3	EO354600	6-L301	EO732656J	12-L8
EI394937J	21-IC2	EJ396453J	17-PJ2	EO354600	6-L302	EO732656J	13-L8
EI394949J	22-IC101	EJ404364J	15-PS2	EO354600	6-L403	ER328278	19-FR4
EI394949J	23-IC1	EJ404365J	16-P5	EO354600	6-L404	ER331619	22-FR122
EI394951J	7-IC700	EJ404372J	15-PS1	EO354600	6-L406	ER331619	23-FR22
EI394983J	6-IC300	EJ408427J	30-8	EO354600	7-L605	ER400729J	6-FR401
EI396454J	7-IC600	EJ410383J	17-PJ4	EO354600	7-L606	ER401039J	6-FR200
EI397123J	13-IC2	EJ410424J	15-P8	EO354600	7-L607	ER403405J	6-R449
EI397285J	14-IC101	EM408437J	30-7	EO354600	7-L610	ER408963J	9-FR101
EI397560J	21-IC3	EM408445J	15-FL1	EO354600	15-L1	ES373099	4-39
EI400672J	29-IC2	EO330244	7-L774	EO354600	17-L1	ES387465J	4-17
EI400672J	31-IC2	EO339907	19-L1	EO364966	7-L802	ES391710J	16-SW9
EI400756J	6-IC403	EO339907	19-L2	EO376600	14-L14	ES393431J	31-SW1
EI400756J	19-IC1	EO345865	24-L1	EO381187J	13-L3B	ES397339J	16-SW10
EI401050J	24-IC106	EO345865	24-L101	EO381188J	13-L4	ES397339J	16-SW11
EI403233J	6-IC402	EO345865	24-L102	EO381189J	14-L150	ES397339J	16-SW12
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EI403467J	6-X502	EO345865	24-L201	EO381196J	6-L401	ES408428J	28-11
EI403469J	6-IC502	EO345865	24-L202	EO381196J	12-L10	ES408428J	30-11
EI404505J	6-IC401	EO345865	24-L251	EO381196J	13-L10	ES408470J	4-43
EI405224J	6-IC406	EO345865	24-L301	EO381197J	7-L804	ES409005J	25-SW3
EI405224J	24-IC103	EO345871	24-L206	EO384903J	21-L2	ES409007J	15-SW1
EI405327J	15-X2	EO345873	24-L204	EO384903J	21-L3	ES409007J	15-SW2
EI405722J	6-IC501	EO345874	24-L207	EO387781J	12-L9	ES409007J	15-SW5
EI408408J1	31-IC1	EO345874	24-L208	EO387781J	13-L9	ES409007J	15-SW6
EI408432J	24-IC101	EO345876	6-L501	EO387799J	7-L807	ES409007J	15-SW7
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EI408449J	29-IC1	EO345880	7-L801	EO388087J	14-L15	ES409007J	15-SW10
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EI408930J	21-IC1	EO345880	7-L810	EO390716J	14-L201	ES409007J	15-SW12
EI408931J	21-X1A	EO345880	7-L871	EO390717J	6-L201	ES409007J	15-SW13
EI408932J	21-X1B	EO345880	10-L101	EO391141J	12-L3	ES409007J	15-SW14
EI408933J	21-X2	EO345880	10-L102	EO391141J	13-L3A	ES409007J	16-SW1
EI408959J	9-IC101	EO345880	10-L103	EO392817J	12-L4	ES409007J	16-SW2
EI408959J	9-IC102	EO345880	10-L104	EO393331J	7-L805	ES409007J	16-SW3
EI408959J	9-IC103	EO345880	10-L105	EO394950J	22-T102	ES409007J	16-SW4
EI408959J	10-IC101	EO345881	6-L402	EO394950J	23-T2	ES409007J	16-SW5
EI408959J	10-IC102	EO345881	6-L503	EO396464J	22-T101	ES409007J	16-SW6
EI408959J	10-IC103	EO345881	6-L505	EO396464J	23-T1	ES409007J	16-SW7
EI408959J	10-IC104	EO345881	6-L506	EO403270J	14-L101	ES409007J	16-SW8
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EI408961J	9-IC104	EO345881	8-L1	EO403342J	7-L809	ET353897	6-TR308
EI408961J	10-IC108	EO345881	9-L102	EO408439J	14-FL201	ET353897	6-TR312
EI408964J	10-IC106	EO345881	9-L111	EO408440J	6-FL200	ET353897	7-TR606
EI410125J	24-IC105	EO345881	14-L8	EO410088J	14-L2	ET353897	7-TR809
EI410265J	24-IC102	EO345881	14-L10	EO410089J	7-L772	ET353897	7-TR810
EI411969J	15-IC1A	EO345881	14-L11	EO410090J	14-L4	ET353897	14-TR8
EI411970J1	15-IC1B	EO345881	21-L1	EO410091J	7-L602	ET353899	6-TR1
EI729997J	12-IC1	EO345881	21-L5	EO410093J	14-L151	ET353899	6-TR3
EI729997J	13-IC1	EO345881	21-L6	EO410094J	7-L603	ET353899	6-TR15
EJ381837J	4-16	EO345881	21-L7	EO410094J	14-L5	ET353899	6-TR207
EJ387497J	4-15	EO345881	21-L8	EO410096J	14-L9	ET353899	6-TR301
EJ387623J	17-PJ1	EO345881	21-L10	EO410099J	24-L154	ET353899	6-TR505
EJ389323J	8-PJ1	EO345881	22-L101	EO410100J	14-L1	ET353899	6-TR508
EJ389323J	11-J5	EO345881	23-L1	EO410101J	14-L13	ET353899	6-TR509

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
ET353899	6-TR510	ET356336	6-TR210	ET397160J	6-TR209	ET397160J	24-TR201
ET353899	7-TR609	ET356336	6-TR306	ET397160J	6-TR211	ET397160J	24-TR202
ET353899	7-TR613	ET356336	6-TR501	ET397160J	6-TR212	ET397160J	24-TR203
ET353899	7-TR614	ET356336	6-TR502	ET397160J	6-TR300	ET397160J	24-TR251
ET353899	7-TR710	ET356336	7-TR811	ET397160J	6-TR302	ET403420J	4-14
ET353899	7-TR711	ET360399	6-TR205	ET397160J	6-TR303	ET404498J	19-TR3
ET353899	7-TR771	ET360399	6-TR304	ET397160J	6-TR403	ET404498J	19-TR5
ET353899	7-TR814	ET360399	6-TR305	ET397160J	6-TR503	ET405342J	29-TR1
ET353899	7-TR818	ET360399	14-TR11	ET397160J	6-TR506	ET405342J	31-TR1
ET353899	7-TR883	ET360399	14-TR18	ET397160J	7-TR604	ET405622J	6-TR11
ET353899	10-TR112	ET360399	14-TR21	ET397160J	7-TR610	ET405622J	19-TR2
ET353899	14-TR2	ET360399	21-TR6	ET397160J	7-TR611	ET405622J	19-TR7
ET353899	14-TR16	ET360399	21-TR7	ET397160J	7-TR701	ET405622J	20-TR9
ET353899	14-TR17	ET361490	4-24	ET397160J	7-TR702	ET405622J	20-TR10
ET353899	14-TR150	ET363953	6-TR309	ET397160J	7-TR703	ET405622J	20-TR12
ET353899	14-TR151	ET364040	6-TR20	ET397160J	7-TR704	ET408826J	15-TR3
ET353899	14-TR152	ET364040	6-TR208	ET397160J	7-TR706	ET408826J	15-TR4
ET353899	24-TR152	ET364040	7-TR617	ET397160J	7-TR707	ET408826J	15-TR5
ET353899	24-TR153	ET364040	14-TR9	ET397160J	7-TR708	ET408826J	15-TR6
ET353899	24-TR204	ET364040	14-TR19	ET397160J	7-TR709	ET408826J	15-TR7
ET353899	24-TR208	ET364040	14-TR20	ET397160J	7-TR802	ET408827J	16-TR2
ET353899	24-TR252	ET364060	15-TR2	ET397160J	7-TR803	ET408827J	16-TR4
ET353899	24-TR253	ET364060	15-TR8	ET397160J	7-TR804	ET408988J	15-PH1
ET354364	14-TR12	ET364060	24-TR103	ET397160J	7-TR805	ET713614	13-Q5
ET354371	7-TR612	ET366168	6-TR70	ET397160J	7-TR806	ET725820J	12-Q1
ET354414	6-TR19	ET366168	6-TR200	ET397160J	7-TR807	ET725820J	13-Q1
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ET354414	6-TR204	ET370310	10-TR115	ET397160J	7-TR815	ET731437J	12-Q3
ET354414	6-TR213	ET370310	10-TR116	ET397160J	7-TR871	EV390157J	14-VR1
ET354414	6-TR214	ET370310	10-TR118	ET397160J	7-TR872	EV397570J	22-VR103
ET354414	6-TR401	ET370310	10-TR119	ET397160J	7-TR881	EV397570J	23-VR3
ET354414	6-TR402	ET370310	21-TR5	ET397160J	7-TR882	EV401032J	18-VR3
ET354414	6-TR404	ET370310	21-TR8	ET397160J	7-TR884	EV403919J	14-VR2
ET354414	6-TR407	ET370310	21-TR10	ET397160J	8-TR3	EV404295J	6-VR200
ET354414	6-TR411	ET370310	21-TR11	ET397160J	8-TR4	EV404295J	22-VR105
ET354414	6-TR504	ET370819	12-Q6	ET397160J	8-TR5	EV404295J	23-VR5
ET354414	6-TR507	ET370819	13-Q6	ET397160J	8-TR6	EV404297J	6-VR305
ET354414	7-TR601	ET373025	20-TR11	ET397160J	9-TR101	EV404297J	6-VR306
ET354414	7-TR603	ET373210	19-TR1	ET397160J	9-TR102	EV404297J	7-VR603
ET354414	7-TR605	ET373210	20-TR8	ET397160J	9-TR105	EV404297J	7-VR604
ET354414	7-TR615	ET373391	19-TR4	ET397160J	10-TR101	EV404298J	22-VR101
ET354414	7-TR616	ET373391	19-TR6	ET397160J	10-TR102	EV404298J	23-VR1
ET354414	7-TR705	ET373985	6-TR408	ET397160J	10-TR103	EV404299J	6-VR201
ET354414	7-TR712	ET373985	6-TR409	ET397160J	10-TR104	EV404299J	7-VR602
ET354414	7-TR800	ET373985	6-TR410	ET397160J	10-TR105	EV404300J	7-VR600
ET354414	9-TR104	ET373985	10-TR128	ET397160J	10-TR106	EV404303J	22-VR104
ET354414	10-TR117	ET373985	10-TR129	ET397160J	10-TR110	EV404303J	23-VR4
ET354414	10-TR123	ET373985	10-TR131	ET397160J	10-TR111	EV405657J	6-VR301
ET354414	10-TR124	ET373985	10-TR136	ET397160J	10-TR120	EV405657J	6-VR303
ET354414	10-TR125	ET373985	21-TR9	ET397160J	10-TR121	EV405657J	6-VR304
ET354414	10-TR130	ET375777	6-TR9	ET397160J	10-TR126	EV405657J	7-VR770
ET354414	10-TR132	ET375986	6-TR6	ET397160J	10-TR127	EV405658J	22-VR102
ET354414	10-TR133	ET388338J	6-TR10	ET397160J	10-TR134	EV405658J	22-VR106
ET354414	14-TR1	ET388338J	6-TR18	ET397160J	10-TR139	EV405658J	22-VR107
ET354414	14-TR10	ET388338J	6-TR405	ET397160J	14-TR3	EV405658J	23-VR2
ET354414	14-TR13	ET388338J	7-TR817	ET397160J	14-TR4	EV405658J	23-VR6
ET354414	14-TR103	ET388338J	24-TR2	ET397160J	14-TR5	EV405658J	23-VR7
ET354414	15-TR1	ET388338J	24-TR105	ET397160J	14-TR6	EV405659J	7-VR601
ET354414	21-TR12	ET390009J	4-19	ET397160J	14-TR7	EV405665J	6-VR300
ET354414	24-TR3	ET394881J	10-TR135	ET397160J	14-TR14	EV405665J	6-VR302
ET354414	24-TR104	ET397160J	6-TR2	ET397160J	14-TR15	EV405665J	6-VR401
ET354415	7-TR602	ET397160J	6-TR5	ET397160J	14-TR201	EV732502J	13-VR3
ET354415	7-TR608	ET397160J	6-TR13	ET397160J	17-TR1	EV733235J	12-VR1
ET354415	7-TR713	ET397160J	6-TR14	ET397160J	21-TR1	EV733235J	12-VR2
ET354415	7-TR801	ET397160J	6-TR23	ET397160J	21-TR3	EV733235J	13-VR1
ET354415	9-TR103	ET397160J	6-TR24	ET397160J	24-TR1	EW348414	27-1
ET354415	24-TR101	ET397160J	6-TR103	ET397160J	24-TR102	EW389313J	4-20
ET356224	7-TR791	ET397160J	6-TR201	ET397160J	24-TR151	EW389317J	14-WP1
ET356236	6-TR4	ET397160J	6-TR202	ET397160J	24-TR154	EW404001M	26-9A
ET356336	6-TR104	ET397160J	6-TR203	ET397160J	24-TR155	EW404002M	26-9B

Part No.	Ref. No.
EW404366J	15-WP1
EW404367J	15-WP3
EW409012J	26-17
EX405691J	14-TH1
HE390013J	3-20
HR405340J	3-13
MA387474J3	2-6
MB407117J	4-11
MB407618J	30-5
MB407622J	28-5
MB407645J	28-4
MB407645J	30-4
MI404552J	3-10
ML387277J3	3-32
ML387311J2	4-42
ML387316J	3-1
ML387318J	3-2
ML387344J	3-54
ML387345J	3-51
ML387346J	3-53
ML387349J2	3-56
ML387350J1	3-47
ML387402J1	4-3
ML387428J	3-39
ML387431J1	3-31
ML390768J4	3-25
ML391745J3	3-41
ML392137J	2-13
ML404567J1	4-1
ML404944J	4-2
ML407119J	3-4
MP404852J	3-64
MR364335	2-18
MR387286J1	3-18
MR387406J	4-35
MR391968J	4-33
MT404547J	3-9
MZV1102A090A	4-25
MZV1102A100A	4-26
MZ387332J	4-28
MZ387333J	4-30
MZ387335J	3-40
MZ387351J2	3-58
MZ387430J	4-21
MZ387445J	4-22
MZ392144J	2-14
MZ395471J3	3-27
MZ401686J1	4-32
MZ402760J2	3-17
MZ404538J	4-29
MZ404542J	4-23
MZ404577J	4-7
MZ404995J	3-62
SA395476J	26-4
SC407627J	28-19
SC407627J	30-19
SE395554J	3-57
SE407612J	28-3
SE407612J	30-3
SE407613J	30-25
SE407625J	28-14
SE407625J	30-14
SE409419J	26-11A
SE409425J	26-11B
SK395423J	26-20
SK407708J	28-21
SK407708J	30-21
SK407713J	28-20
SK407713J	30-20
SK409478J	26-21
SK409479J	26-23
SP404383J	8-1
SP404384J	11-1
SP407634J	28-24B
SP407635J	28-24A
SP407642J	30-24
SP409427J	26-15C
SP409433J	26-15A
SP409435J	26-Q5D
SP409437J	26-15E
SP409439J	26-15B
SP409456J	26-18A
SP409460J	26-18C
SP409462J	26-18D
SP409464J	26-18E
SP409467J	26-18B
SP409486J	26-1
SZ387263J4	3-24
SZ387388J	2-4
SZ408435J	26-24
SZ408435J	28-23
SZ408435J	30-23
SZ408436J	26-22
SZ408436J	28-22
SZ408436J	30-22
SZ409014J	26-14
SZ409420J	26-13
SZ409447J	26-16
SZ409480J	26-25
VT387394J1	3-37
VT401282J	2-20
ZG373900	3-12
ZG387282J	3-33
ZG387320J	3-3
ZG387323J	3-5
ZG387348J1	3-49
ZG387403J	4-5
ZG387413J1	4-27
ZG387417J	3-44
ZG387418J	3-45
ZG387420J1	3-55
ZG387421J	3-50
ZG387438J1	3-11
ZG387443J	4-34
ZG387468J	4-4
ZG387502J	4-38
ZG388290J1	3-52
ZG392143J	2-15
ZG392831J	3-46
ZG395386J	26-12
ZG395470J	3-26
ZG395567J	3-42
ZG407614J	28-16
ZG407614J	30-16
ZG407615J	28-17
ZG407615J	30-17
ZG407616J	29-1
ZG407616J	31-1
ZG407617J	29-2
ZG407617J	31-2
ZS321298	2-3
ZS321298	3-15
ZS336614	28-12
ZS336614	30-12
ZS336714	2-12
ZS336714	3-22
ZS358936	3-59
ZS358936	4-41
ZS358936	26-6
ZS361507	26-3
ZS362378	26-5
ZS364543	2-21
ZS365149	4-10
ZS365702	26-2
ZS373962	26-8
ZS374389	28-10
ZS374389	30-10
ZS374458	3-38
ZS379350	2-11
ZS379405	2-5
ZS389853J	3-16
ZS389950J	4-40
ZS404844J	3-14
ZS409503J	26-19
ZS425981	4-36
ZS467796	2-9
ZS563444	2-7
ZW332843	3-30
ZW374445	3-19
ZW387492J	4-8
ZW389814J	3-8
ZW389923J	4-6
ZW392224J	2-16
ZW392225J	2-17
ZW392226J	2-19
ZW401776J	3-34

MEMO

ABBREVIATIONS (VIDEO)

ABBREVIATION	EXPLANATION
A	Audio or Analogue
AC	Alternating Current
ACC	Automatic Color Control
A/C	Audio and Control
ADJ	ADJust (ment)
AFC	Automatic Frequency Control
AFT	Automatic Fine Tuning
AGC	Automatic Gain Control
AH	Audio Head
AL	ALways (voltage)
ALC	Automatic Level Control
A-SW.P	Audio SWitching Pulse
A-MUTE	Audio MUTE
ANT	ANTenna
APC	Automatic Phase Control
ASSY	ASSemblY
BAL	BALance
B DOWN	Break DOWN
BGP	Burst Gate Pulse
BLK	BLocK or BLacK
BPF	Band Pass Filter
BU	Back Up (voltage)
B/W	Black and White
C	Chroma or Color
CCD	Charge Coupled Device
CCIR	Comité Consultatif International des Radio communications
CH (ch)	CHannel (channel)
CLK	CLocK
CM	Capstan Motor
CN	CoNnector
COMP	COMParator
CSW	Cassette SWitch
CSYNC	Composite SYNC
CTL	ConTrol
CUE	CUE
DAC	Digital to Analog Converter
DC	Direct Current
DEMOD	DEMODulator
DET	DETetct (DETector)
DL	Delay Line
DM	Drum Motor
DOC	Drop Out Compensator
D.P.E	Drum Phase Error
D.PG	Drum Pulse Generator
EE	Electronic to Electronic
EF	Emitter Follower
EMPHA	EMPHAsis
ENV	ENVelope
EP	Extended Play
EP ROM	Erasable Programmable ROM
EQ	EQualizer
FE	Full track Erase
FF	Flip-Flop or Fast Foward
FG	Frequency Generator
Fig	Figure
FLD	FLuorescent Display
FM	Frequency Modulation
Fo	resonance Frequency
FREQ	FREQuency
GND	GrouND
H	Horizontal
HP	Horizontal (sync) pulse
HPF	High Pass Filter
HQ	High Quality System
IC	Integrated Circuit
ID	IDentification
IDL	IDLe (Voltage)
IMS	Interactive Monitor System
INS	INSert
INV	INVerter
L	Left
LED	Light Emitting Diode
LIM	LIMitter
LM	Loading Motor
LM STP	Loading Motor STop
LP	Long Play
LPF	Low Pass Filter
ME-SECAM	Middle East SECAM
MI-COM	MIcro COMputer
MM	Mono-stayble Multi

ABBREVIATION	EXPLANATION
MOD	MODulator
MRS	Motor ReverSe
NG	Noise Gate
NICAM	Near Instanteneous Compand Audio Multiplex
NON-LIN	NON-LINear
N.T.S.C.	National Television System Committee
OSC	OSCillator
PAL	Phase Alternation by Line
PB	Play Back
PCB (P.C.B)	Printed Circuit Board
P-COM	Phase-COMparator
P DOWN	Power DOWN
PG	Pulse Generator
P.I.P	Picture In Picture
PL, PLG	PLunger (PLunGer)
PRG (PGM)	PRoGram (ProGraM)
PU	Pick UP (head, pulse)
PWR	PoWeR
Q	Quality factor
R	Right
RAM	Random Access Memory
REC	RECord
REF	REFerence
REF-V	REFerence Vertical signal
REG	REGulator
REV (REVW)	REView (REVieW)
REW	REWind
RF	Radio Frequency
ROM	Read Only Memory
R.S SW	Record-Safety SWitch
RST (RES)	ReSet (RESet)
RVS	ReVerSe
S	Sensor, Shield
SAW	Surface Acoustic Wave
SC	SimulCast
S CLK	Serial CLocK
SECAM	SÉquentiel Couleur À Mémoire
S & H	Sample and Hold
SLP	Super Long Play
SP	Standard Play
SPD	SPeeD
SRP	Supply Reel Pulse
SRV	SeRVo
SOW	Sync On Word
STBY	STandBY
S.VHS	Super VHS
SW	SWitch
SW'NG	SWitchiNG
SWP	SWitching Pulse
SYNC	SYNChronize
T-AUDIO	Tuner AUDIO
TPZ (TRAPE)	TraPeZoid (TRAPEzoid)
TRK	TRacKing
TRP	Take up Reel Pulse
T/U	Take Up
TV	TeleVision
UHF	Ultra High Frequency
UNR	UNRegulated (voltage)
V	Vertical or Video
VASS	Video Address Search System
VCO	Voltage Controlled Oscillator
VH	Video Head
VHF	Very High Frequency
VHS	Video Home System
VIF	Video Intermediate Frequency
VISS	Video Index Search System
VJ	Video Judge
VM	Voltage for Memory
VOB	Video On Blank
VOW	Video On Word
VP	Vertical (sync) Pulse
VPS	Video Program System
VPT	Video Programming by video Text
VT	Voltage for Tuning
WHT	WHiTe
Y	Luminance
2H	2 Hour (SP)
4H	4 Hour (LP)
6H	6 Hour (SLP/EP)

AKAI

MODEL VS-F1000EK-VN/EOG-VD
MODEL VS-F1010EOH-D/EOH-N
MODEL VS-F1030EOH-DN

SCHEMATIC DIAGRAMS AND PC BOARDS

TABLE OF CONTENTS

I. BLOCK DIAGRAMS

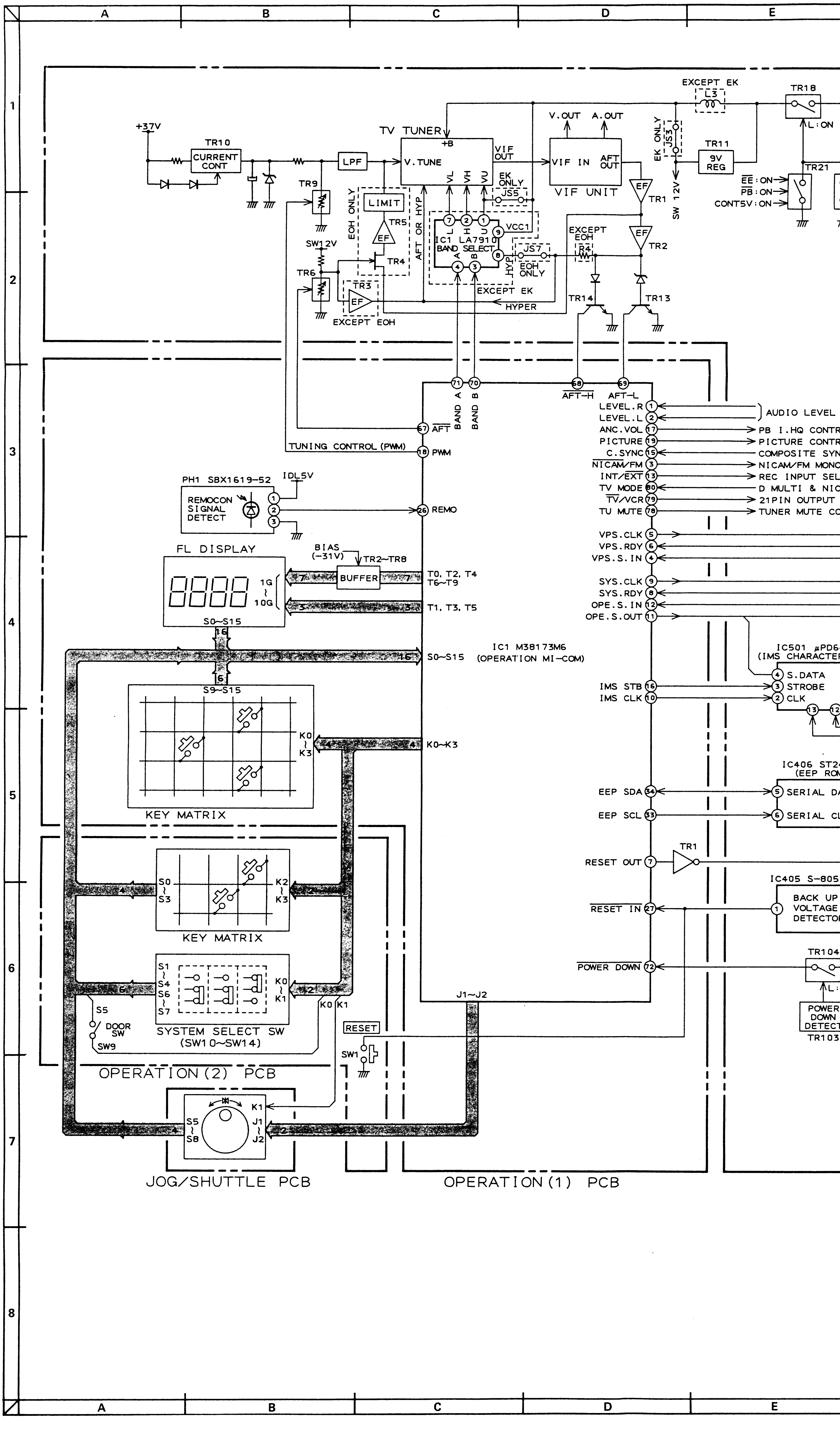
1. OPERATION & SYSCON 3
2. VIDEO 4
3. AUDIO 5
4. SERVO 6
5. PRE AMP 7
6. VS-F1000EK-VN/EOG-VD VPST/PDC 8

II. SCHEMATIC DIAGRAMS AND PC BOARDS

1. CONNECTION DIAGRAM 9
2. POWER SUPPLY (1) & (2) 10
3. MAIN 1/3 (SERVO/SYSCON BLOCK) 12
4. MAIN 2/3 (AUDIO BLOCK) 13
5. MAIN 3/3 (RF BLOCK) 14
6. VIDEO 16
7. PRE AMP 18
8. OPERATION (1), (2) & FRONT 21
9. IN-OUT (A), (B) 22
10. VS-F1000EK-VN/EOG-VD VPST/PDC 25
11. DN-MULTI/NICAM 26
12. VS-F1000EOG-VD CANAL PLUS (A) & (B) 29
13. VS-F1000EOG-VD/VS-F1010EOH-D D-MULTI 30
14. VIF UNIT 33
15. RC-V1001E/G REMOTE CONTROL UNIT 34
16. RC-V1002E REMOTE CONTROL UNIT 37

III. INFORMATION OF ICs 38

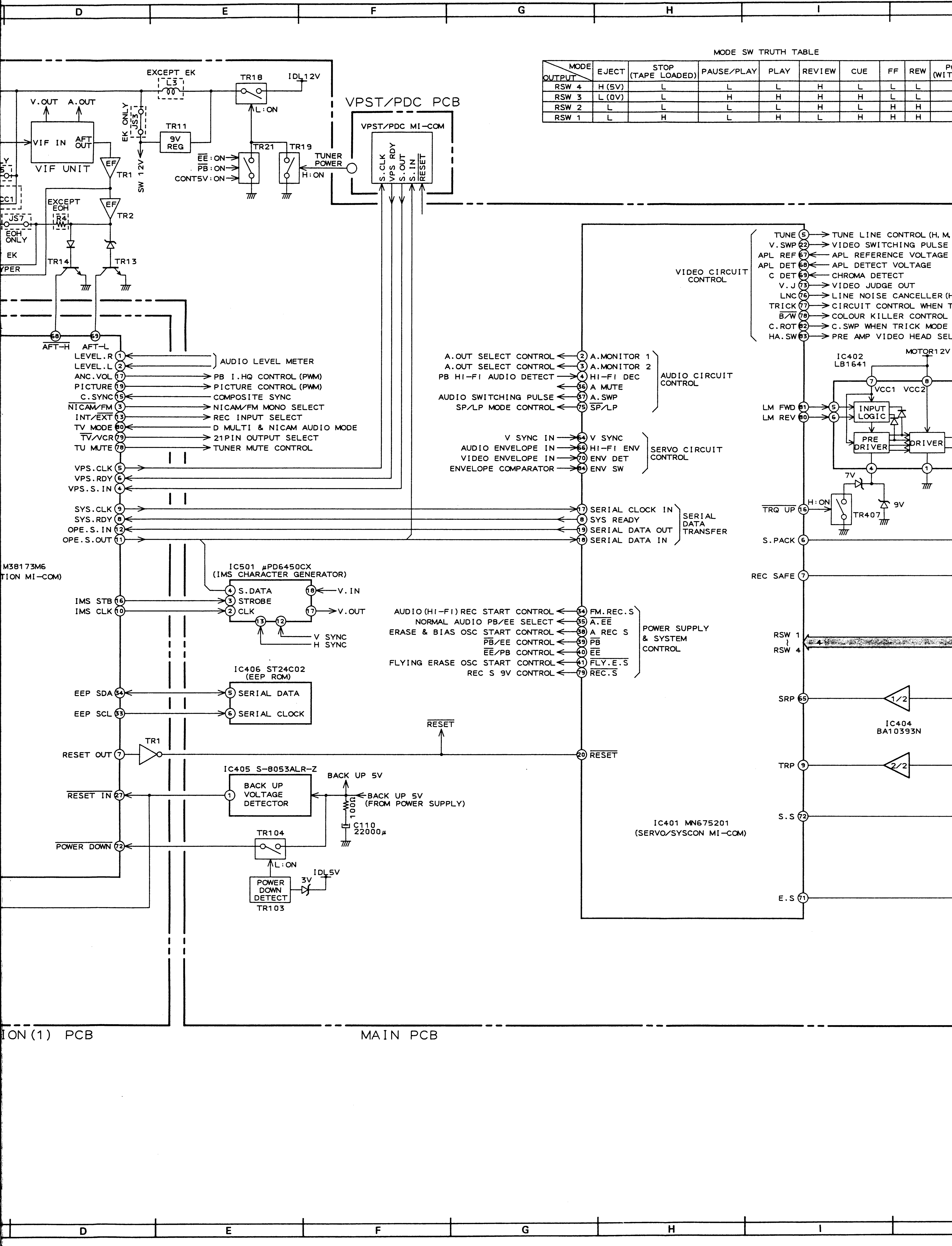
Use these schematic diagrams and PC boards together with the provided service manual.



A
B
C
D
E
1
2
3
4
5
6
7
8
EXCEPT EK
L3
TR18
L:ON
+37V
TR10
CURRENT CONT
TV TUNER
+B
V.TUNE
VIF OUT
V.OUT
A.OUT
VIF IN
AFT OUT
VIF UNIT
EK ONLY
JS3
TR11
9V REG
TR21
EE:ON
PB:ON
CONT5V:ON
SW 12V
LPF
TR9
EOH ONLY
LIMIT
TR5
EF
AFT OR HYP
VL
VH
VU
EK ONLY
JS5
IC1 LA7910
BAND SELECT
VCC1
HYP
JS7
EOH ONLY
EXCEPT EOH
R4
TR1
TR2
SW12V
TR4
TR6
TR3
EXCEPT EOH
EXCEPT EK
HYPER
TR14
TR13
71
70
68
69
BAND A
BAND B
AFT-H
AFT-L
67 AFT
TUNING CONTROL (PWM)
18 PWM
LEVEL.R 1
LEVEL.L 2
AUDIO LEVEL
ANC.VOL 17
PB I.HQ CONTR
PICTURE 19
PICTURE CONTR
C.SYNC 15
COMPOSITE SYN
NICAM/FM 3
NICAM/FM MONO
INT/EXT 13
REC INPUT SEL
TV MODE 80
D MULTI & NIC
TV/VCR 79
21PIN OUTPUT
TU MUTE 78
TUNER MUTE CO
PH1 SBX1619-52
IDL5V
REMOCON SIGNAL DETECT
26 REMO
VPS.CLK 5
VPS.RDY 6
VPS.S.IN 4
FL DISPLAY
BIAS (-31V)
TR2~TR8
BUFFER
T0, T2, T4 T6~T9
T1, T3, T5
8888
1G ~ 10G
SYS.CLK 9
SYS.RDY 8
OPE.S.IN 12
OPE.S.OUT 11
S0~S15
16
IC1 M38173M6 (OPERATION MI-COM)
IC501 μPD6
(IMS CHARACTER
S.DATA
STROBE
CLK
IMS STB 16
IMS CLK 10
S9~S15
K0 ~ K3
K0~K3
IC406 ST2
(EEP ROM
EEP SDA 34
SERIAL D
EEP SCL 33
SERIAL C
KEY MATRIX
RESET OUT 7
TR1
IC405 S-805
BACK UP VOLTAGE DETECTOR
RESET IN 27
S0 ~ S3
K2 ~ K3
KEY MATRIX
POWER DOWN 72
TR104
POWER DOWN DETECT
TR103
S1 ~ S4
S6 ~ S7
K0 ~ K1
S5
DOOR SW
SW9
SYSTEM SELECT SW (SW10~SW14)
K0 K1
J1~J2
RESET
SW1
OPERATION (2) PCB
S5 ~ S8
K1
J1 ~ J2
JOG/SHUTTLE PCB
OPERATION (1) PCB

MODE SW TRUTH TABLE

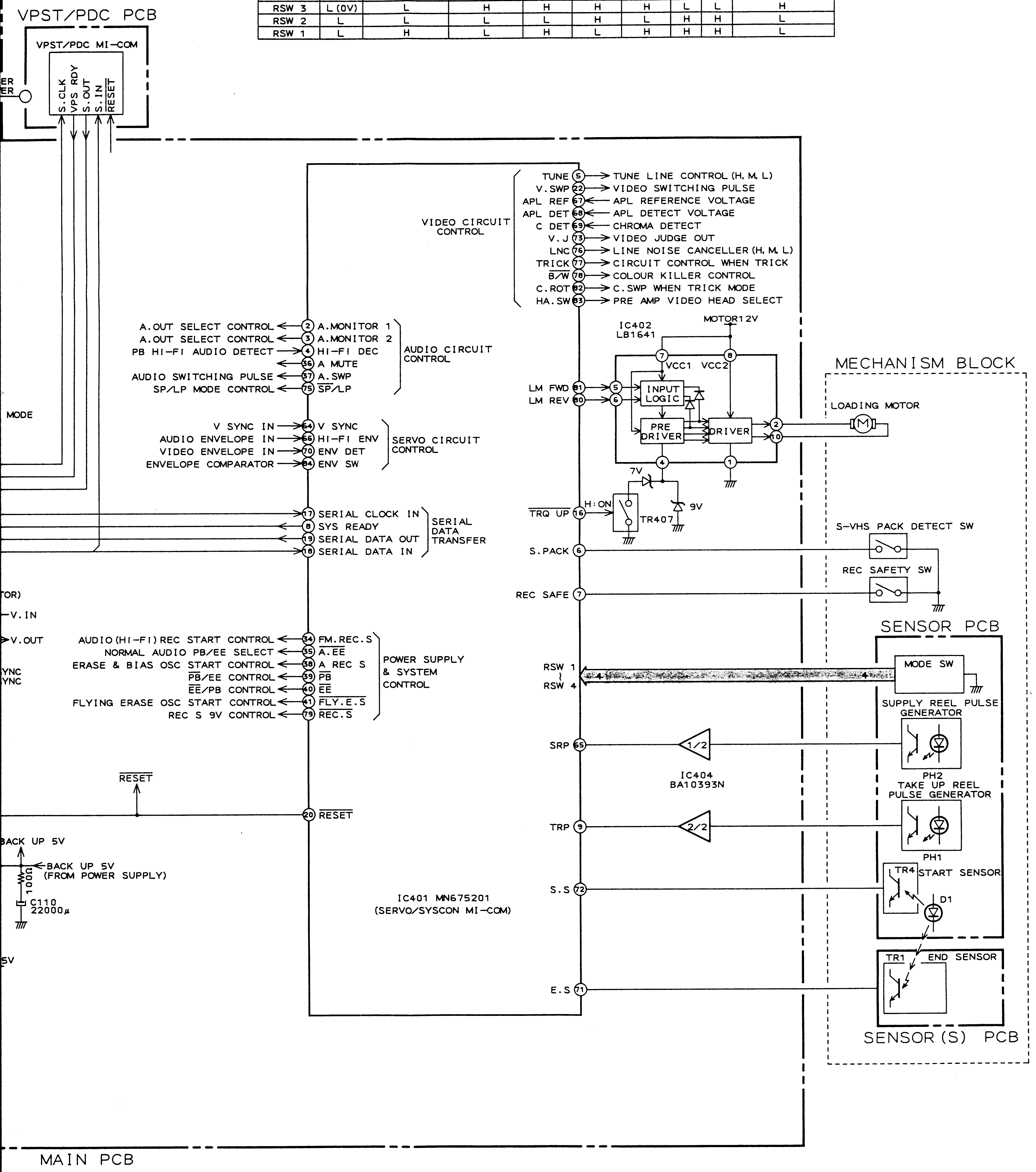
MODE / OUTPUT	EJECT	STOP (TAPE LOADED)	PAUSE/PLAY	PLAY	REVIEW	CUE	FF	REW	P (WIT
RSW 4	H (5V)	L	L	L	H	L	L	L	
RSW 3	L (0V)	L	H	H	H	H	L	L	
RSW 2	L	L	L	L	H	L	H	H	
RSW 1	L	H	L	H	L	H	H	H	



D
E
F
G
H
I
EXCEPT EK
L3
TR18
IDL12V
L:ON
V.OUT
A.OUT
EK ONLY
JS3
TR11
9V REG
VIF IN
AFT OUT
VIF UNIT
EF
TR1
SW 12V
EE:ON
PB:ON
CONT5V:ON
TR21
TR19
H:ON
TUNER POWER
VPST/PDC PCB
VPST/PDC MI-COM
S.CLK
VPS RDY
S.OUT
S.IN
RESET
EXCEPT EOH
R4
JS7
EOH ONLY
EK
TR2
TR14
TR13
68 AFT-H
69 AFT-L
LEVEL.R 1
LEVEL.L 2
AUDIO LEVEL METER
ANC.VOL 17
PB I.HQ CONTROL (PWM)
PICTURE 19
PICTURE CONTROL (PWM)
C.SYNC 15
COMPOSITE SYNC
NICAM/FM 3
NICAM/FM MONO SELECT
INT/EXT 13
REC INPUT SELECT
TV MODE 80
D MULTI & NICAM AUDIO MODE
TV/VCR 79
21PIN OUTPUT SELECT
TU MUTE 78
TUNER MUTE CONTROL
VPS.CLK 5
VPS.RDY 6
VPS.S.IN 4
SYS.CLK 9
SYS.RDY 8
OPE.S.IN 12
OPE.S.OUT 11
M38173M6
TION MI-COM)
IC501 μPD6450CX
(IMS CHARACTER GENERATOR)
IMS STB 16
IMS CLK 10
4 S.DATA
3 STROBE
2 CLK
18 V.IN
17 V.OUT
13
12
V SYNC
H SYNC
IC406 ST24C02
(EEP ROM)
EEP SDA 34
EEP SCL 33
5 SERIAL DATA
6 SERIAL CLOCK
TR1
RESET OUT 7
RESET
IC405 S-8053ALR-Z
BACK UP VOLTAGE DETECTOR
RESET IN 27
BACK UP 5V
BACK UP 5V (FROM POWER SUPPLY)
100Ω
C110 22000μ
TR104
POWER DOWN 72
L:ON
POWER DOWN DETECT
TR103
3V
IDL5V
ION (1) PCB
MAIN PCB
A.OUT SELECT CONTROL 2 A.MONITOR 1
A.OUT SELECT CONTROL 3 A.MONITOR 2
PB HI-FI AUDIO DETECT 4 HI-FI DEC
36 A MUTE
AUDIO SWITCHING PULSE 37 A.SWP
SP/LP MODE CONTROL 75 SP/LP
AUDIO CIRCUIT CONTROL
V SYNC IN 64 V SYNC
AUDIO ENVELOPE IN 66 HI-FI ENV
VIDEO ENVELOPE IN 70 ENV DET
ENVELOPE COMPARATOR 84 ENV SW
SERVO CIRCUIT CONTROL
17 SERIAL CLOCK IN
8 SYS READY
19 SERIAL DATA OUT
18 SERIAL DATA IN
SERIAL DATA TRANSFER
AUDIO (HI-FI) REC START CONTROL 34 FM.REC.S
NORMAL AUDIO PB/EE SELECT 35 A.EE
ERASE & BIAS OSC START CONTROL 38 A REC S
PB/EE CONTROL 39 PB
EE/PB CONTROL 40 EE
FLYING ERASE OSC START CONTROL 41 FLY.E.S
REC S 9V CONTROL 79 REC.S
POWER SUPPLY & SYSTEM CONTROL
20 RESET
IC401 MN675201
(SERVO/SYSCON MI-COM)
VIDEO CIRCUIT CONTROL
TUNE 5 TUNE LINE CONTROL (H, M,
V.SWP 22 VIDEO SWITCHING PULSE
APL REF 67 APL REFERENCE VOLTAGE
APL DET 68 APL DETECT VOLTAGE
C DET 69 CHROMA DETECT
V.J 73 VIDEO JUDGE OUT
LNC 76 LINE NOISE CANCELLER (H
TRICK 77 CIRCUIT CONTROL WHEN T
B/W 78 COLOUR KILLER CONTROL
C.ROT 82 C.SWP WHEN TRICK MODE
HA.SW 83 PRE AMP VIDEO HEAD SEL
IC402
LB1641
MOTOR12V
VCC1
VCC2
LM FWD 81
LM REV 80
INPUT LOGIC
PRE DRIVER
DRIVER
7V
9V
TRQ UP 16
H:ON
TR407
S.PACK 6
REC SAFE 7
RSW 1 ~ RSW 4
SRP 65
1/2
IC404
BA10393N
TRP 9
2/2
S.S 72
E.S 71

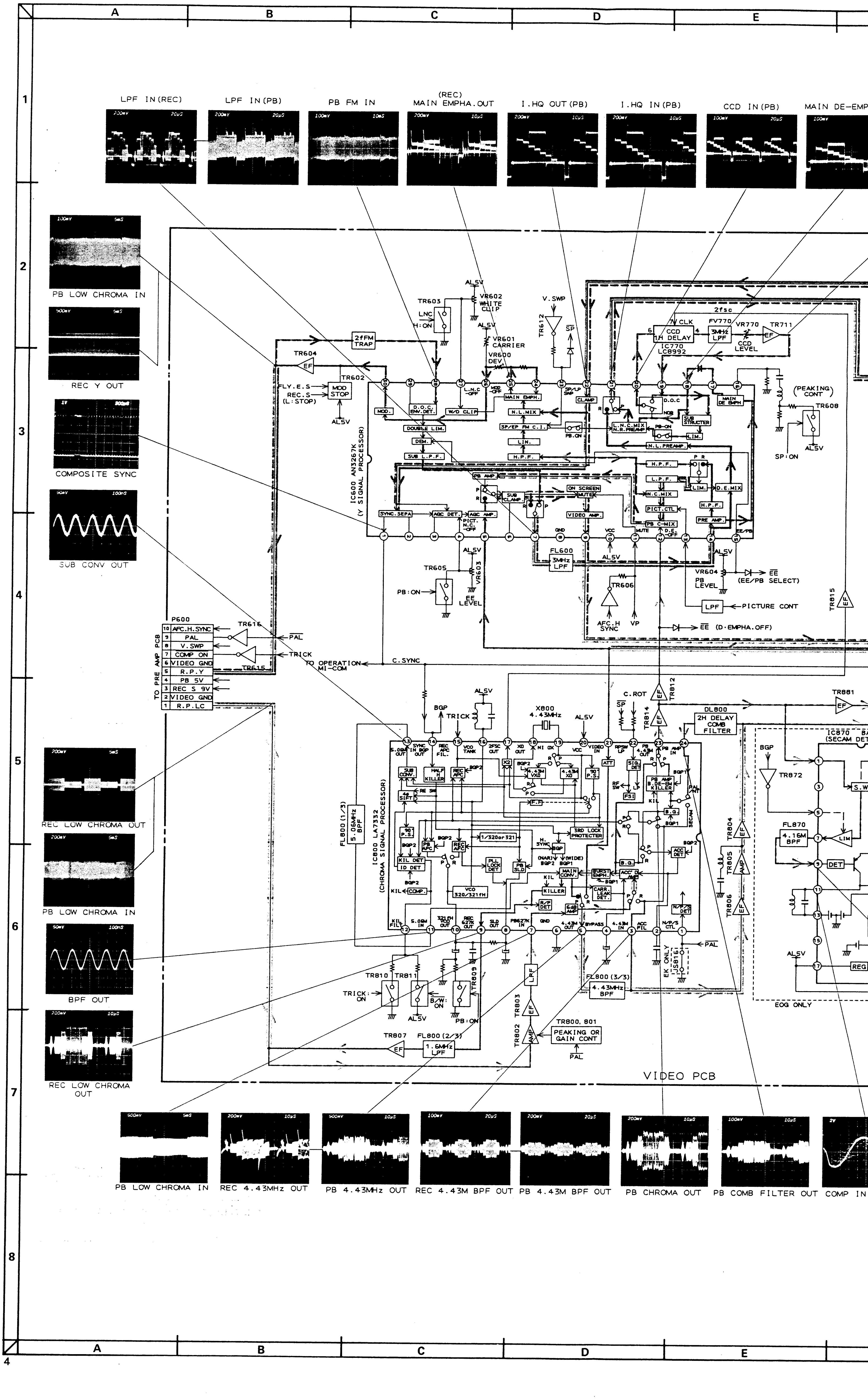
MODE SW TRUTH TABLE

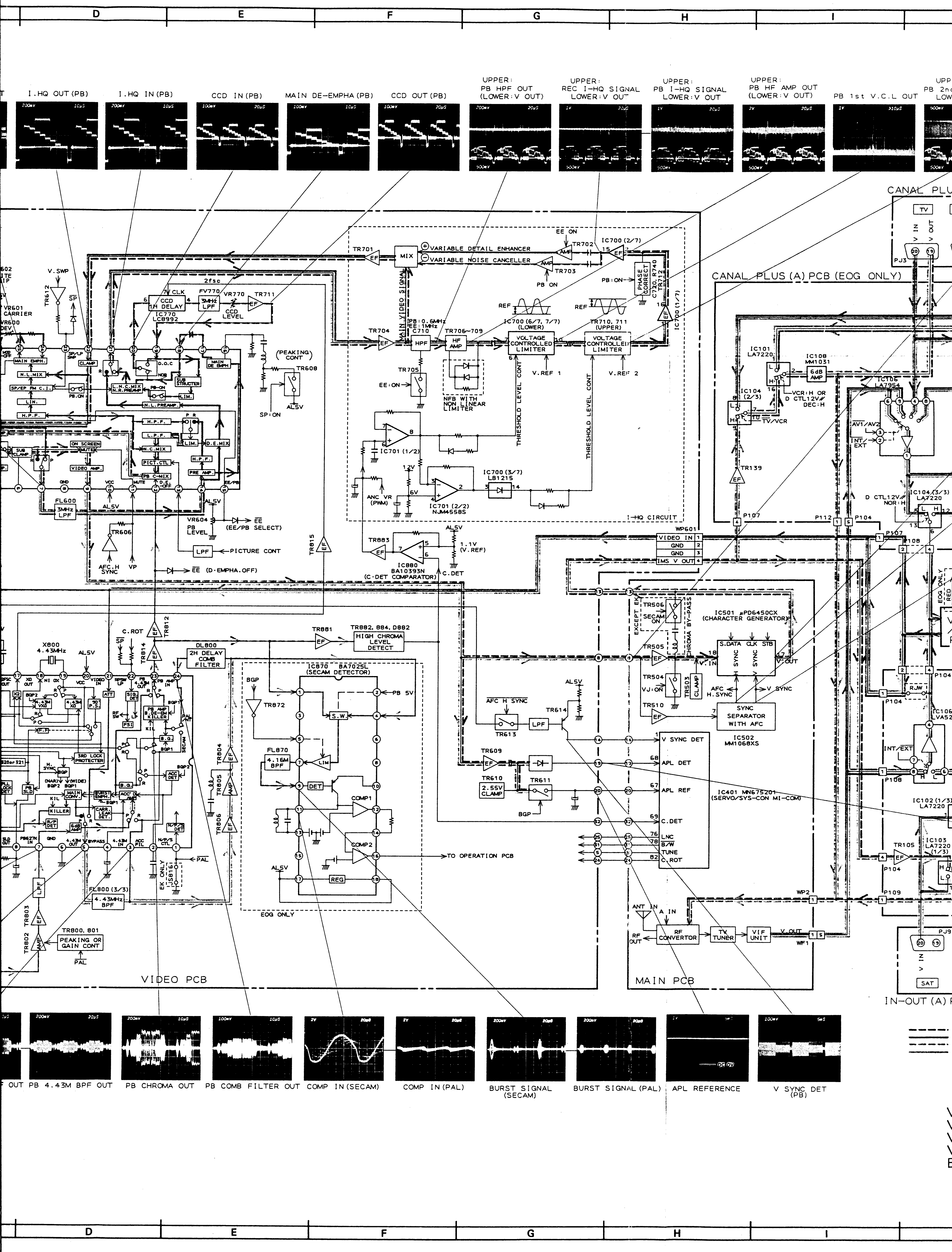
MODE / OUTPUT	EJECT	STOP (TAPE LOADED)	PAUSE/PLAY	PLAY	REVIEW	CUE	FF	REW	POWER OFF (WITH CASSETTE)
RSW 4	H (5V)	L	L	L	H	L	L	L	H
RSW 3	L (0V)	L	H	H	H	H	L	L	H
RSW 2	L	L	L	L	H	L	H	H	L
RSW 1	L	H	L	H	L	H	H	H	L


F
G
H
I
J
K
1
2
3
4
5
6
7
8
VPST/PDC PCB
VPST/PDC MI-COM
S.CLK
VPS RDY
S.OUT
S.IN
RESET
ER
ER
MODE
TOR)
-V.IN
V.OUT
YNC
YNC
BACK UP 5V
BACK UP 5V (FROM POWER SUPPLY)
100Ω
C110
22000μ
5V
VIDEO CIRCUIT CONTROL
TUNE 5 TUNE LINE CONTROL (H, M, L)
V.SWP 22 VIDEO SWITCHING PULSE
APL REF 67 APL REFERENCE VOLTAGE
APL DET 68 APL DETECT VOLTAGE
C DET 69 CHROMA DETECT
V.J 73 VIDEO JUDGE OUT
LNC 76 LINE NOISE CANCELLER (H, M, L)
TRICK 77 CIRCUIT CONTROL WHEN TRICK
B/W 78 COLOUR KILLER CONTROL
C.ROT 82 C.SWP WHEN TRICK MODE
HA.SW 83 PRE AMP VIDEO HEAD SELECT
A.OUT SELECT CONTROL 2 A.MONITOR 1
A.OUT SELECT CONTROL 3 A.MONITOR 2
PB HI-FI AUDIO DETECT 4 HI-FI DEC
36 A MUTE
AUDIO SWITCHING PULSE 37 A.SWP
SP/LP MODE CONTROL 75 SP/LP
AUDIO CIRCUIT CONTROL
V SYNC IN 64 V SYNC
AUDIO ENVELOPE IN 66 HI-FI ENV
VIDEO ENVELOPE IN 70 ENV DET
ENVELOPE COMPARATOR 84 ENV SW
SERVO CIRCUIT CONTROL
17 SERIAL CLOCK IN
8 SYS READY
19 SERIAL DATA OUT
18 SERIAL DATA IN
SERIAL DATA TRANSFER
AUDIO (HI-FI) REC START CONTROL 34 FM.REC.S
NORMAL AUDIO PB/EE SELECT 35 A.EE
ERASE & BIAS OSC START CONTROL 38 A REC S
PB/EE CONTROL 39 PB
EE/PB CONTROL 40 EE
FLYING ERASE OSC START CONTROL 41 FLY.E.S
REC S 9V CONTROL 79 REC.S
POWER SUPPLY & SYSTEM CONTROL
RESET
20 RESET
IC401 MN675201
(SERVO/SYSCON MI-COM)
IC402
LB1641
MOTOR12V
VCC1
VCC2
LM FWD 81
LM REV 80
INPUT LOGIC
PRE DRIVER
DRIVER
7V
9V
H:ON
TRQ UP 16
TR407
S.PACK 6
REC SAFE 7
RSW 1 ~ RSW 4
SRP 65
TRP 9
S.S 72
E.S 71
IC404
BA10393N
1/2
2/2
MECHANISM BLOCK
LOADING MOTOR
M
S-VHS PACK DETECT SW
REC SAFETY SW
SENSOR PCB
MODE SW
SUPPLY REEL PULSE GENERATOR
PH2
TAKE UP REEL PULSE GENERATOR
PH1
TR4
START SENSOR
D1
TR1
END SENSOR
SENSOR (S) PCB
MAIN PCB

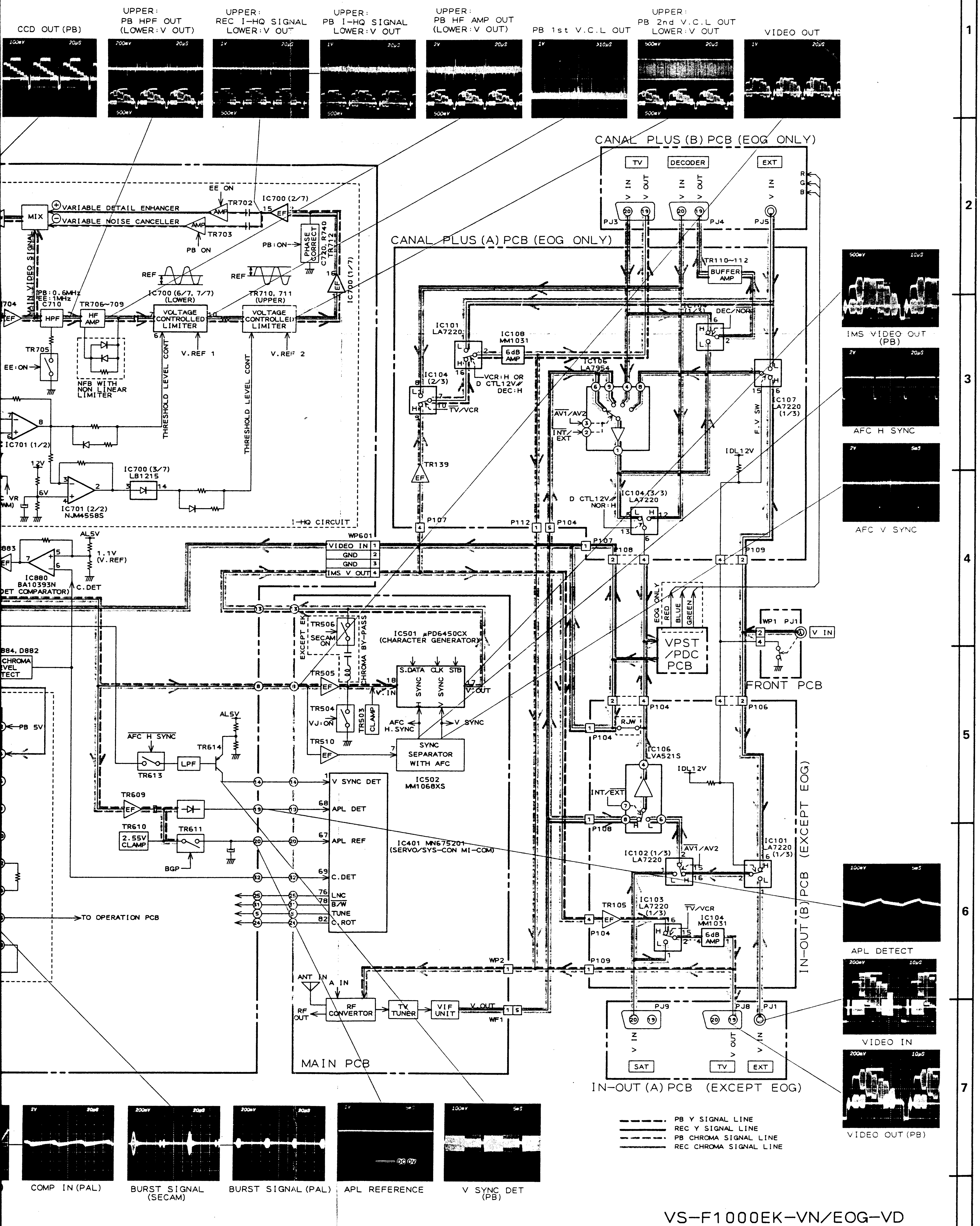
VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
OPERATION & SYSCON
BLOCK DIAGRAM
No.6-1 V115451M
A1

F G H I J K

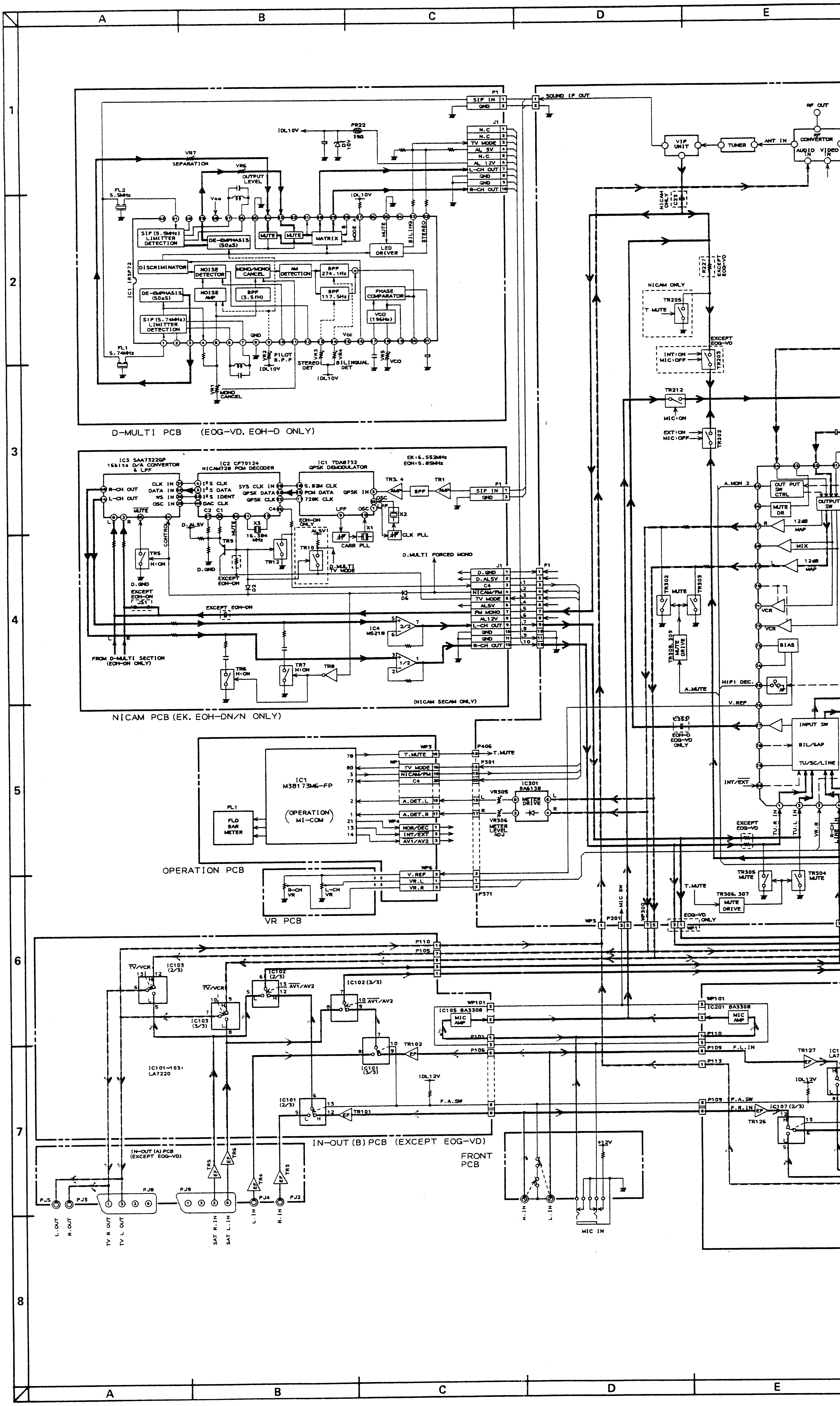

A
B
C
D
E
1
2
3
4
5
6
7
8
LPF IN(REC)
LPF IN(PB)
PB FM IN
(REC) MAIN EMPHA.OUT
I.HQ OUT(PB)
I.HQ IN(PB)
CCD IN(PB)
MAIN DE-EMP
PB LOW CHROMA IN
REC Y OUT
COMPOSITE SYNC
SUB CONV OUT
REC LOW CHROMA OUT
PB LOW CHROMA IN
BPF OUT
REC LOW CHROMA OUT
PB LOW CHROMA IN
REC 4.43MHz OUT
PB 4.43MHz OUT
REC 4.43M BPF OUT
PB 4.43M BPF OUT
PB CHROMA OUT
PB COMB FILTER OUT
COMP IN
IC600 AN3267K (Y SIGNAL PROCESSOR)
IC800 LA7332 (CHROMA SIGNAL PROCESSOR)
IC770 LC8992
CCD 1H DELAY
IC870 (SECAM DET)
TR603
LNC H:ON
VR602 WHITE CLIP
VR601 CARRIER
VR600 DEV
V.SWP
SP
TR612
2fsc
FV770 3MHz LPF
VR770 CCD LEVEL
TR711
2fFM TRAP
TR604
TR602
FLY.E.S
REC.S (L:STOP)
MOD STOP
AL5V
MOD.
D.O.C. ENV.DET.
W/D CLIP
DOUBLE LIM.
DEM.
SUB L.P.F.
MAIN EMPH.
N.L.MIX
SP/EP FM c.I.
LIN.
H.P.F.
CLAMP
L.N.C.MIX N.R.PREAMP
D.O.C
SUB STRUCTER
LIM.
N.L.PREAMP.
MAIN DE EMPH
(PEAKING CONT)
TR608
SP:ON
PB AMP
SUB CLAMP
ON SCREEN MUTE
VIDEO AMP.
SYNC.SEPA
AGC DET.
AGC AMP.
PICT. N.C. -OFF
H.P.F.
L.P.F.
N.C.MIX
PICT.CTL
PB C-MIX
D.E.MIX
PRE AMP.
GND
VCC
MUTE
D.E. OFF
EE/PB
FL600 3MHz LPF
TR605
PB:ON
VR603 EE LEVEL
TR606
AFC.H SYNC
VP
VR604 PB LEVEL
(EE/PB SELECT)
LPF
PICTURE CONT
EE (D-EMPHA.OFF)
TR815
P600
10 AFC.H.SYNC
9 PAL
8 V.SWP
7 COMP ON
6 VIDEO GND
5 R.P.Y
4 PB 5V
3 REC S 9V
2 VIDEO GND
1 R.P.LC
TO PRE AMP PCB
TR616
TR615
PAL
TRICK
TO OPERATION MI-COM
C.SYNC
BGP
TRICK
X800 4.43MHz
C.ROT
TR814
TR812
DL800 2H DELAY COMB FILTER
TR881
TR872
FL870 4.16M BPF
LIM
DET
REG
S.W
FL800(1/3) 5.06MHz BPF
SUB CONV.
HALF H KILLER
REC APC
4.43M VXO
4.43M XO
90 P.S.
ATT
SIG. DET
PB AMP B.DE-EM KILLER
F.F.
1/320or321
3RD LOCK PROTECTER
KIL DET
ID DET
COMP.
PLL LOCK DET
PB SLD
VCO 320/321fH
MAIN CONV.
BURST EMPH.
ACC DET
CARR. LEAK DET.
KILLER
R/P DET
6dB AMP
N/P/S DET
B.G.
SECAM
PAL
TR804
TR805
TR806
EK ONLY JS816
FL800(3/3) 4.43MHz BPF
TR810
TR811
TRICK: ON
B/W: ON
TR809
PB:ON
TR803
LPF
TR802
TR800, 801 PEAKING OR GAIN CONT
TR807
FL800(2/3) 1.6MHz LPF
VIDEO PCB
EOG ONLY

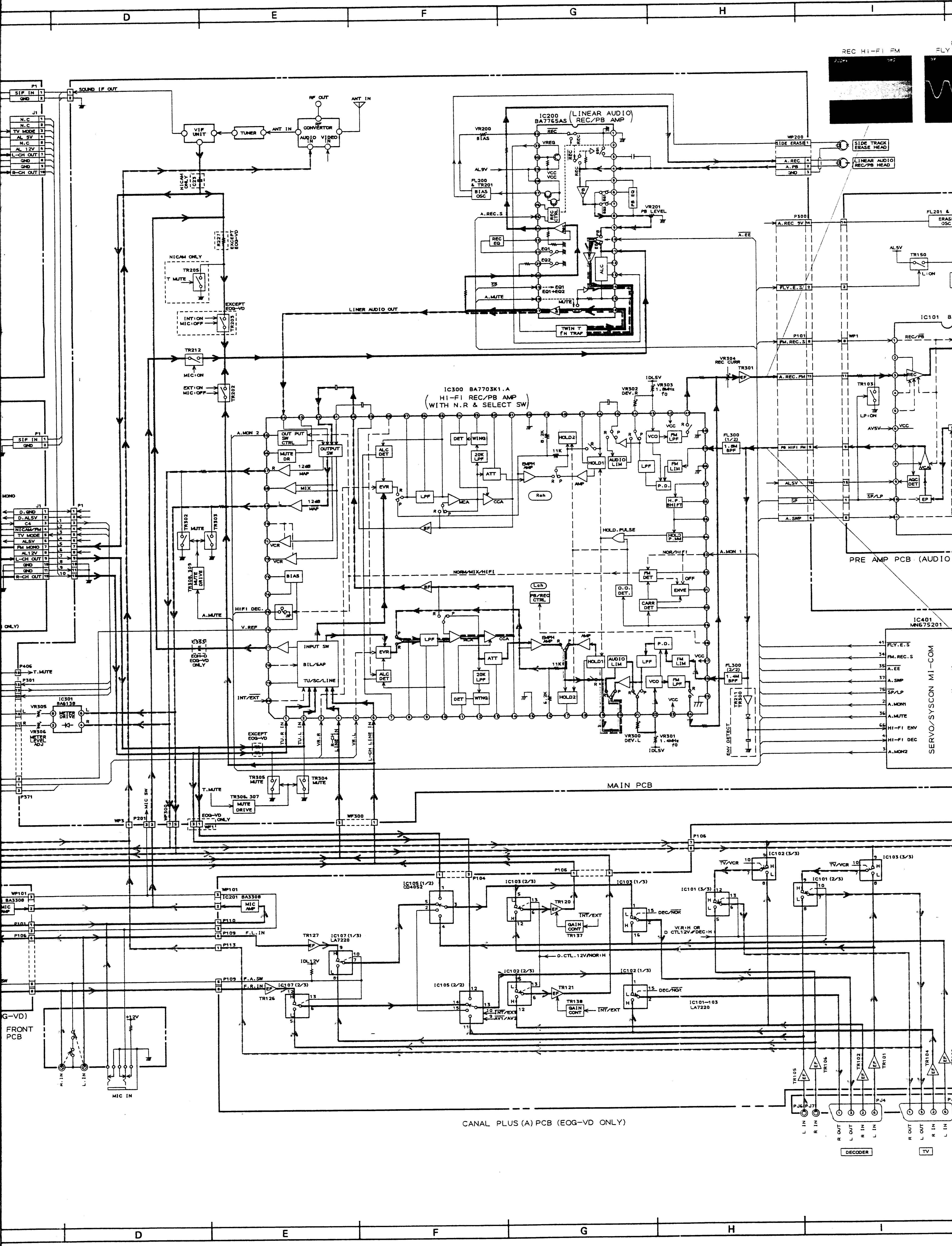


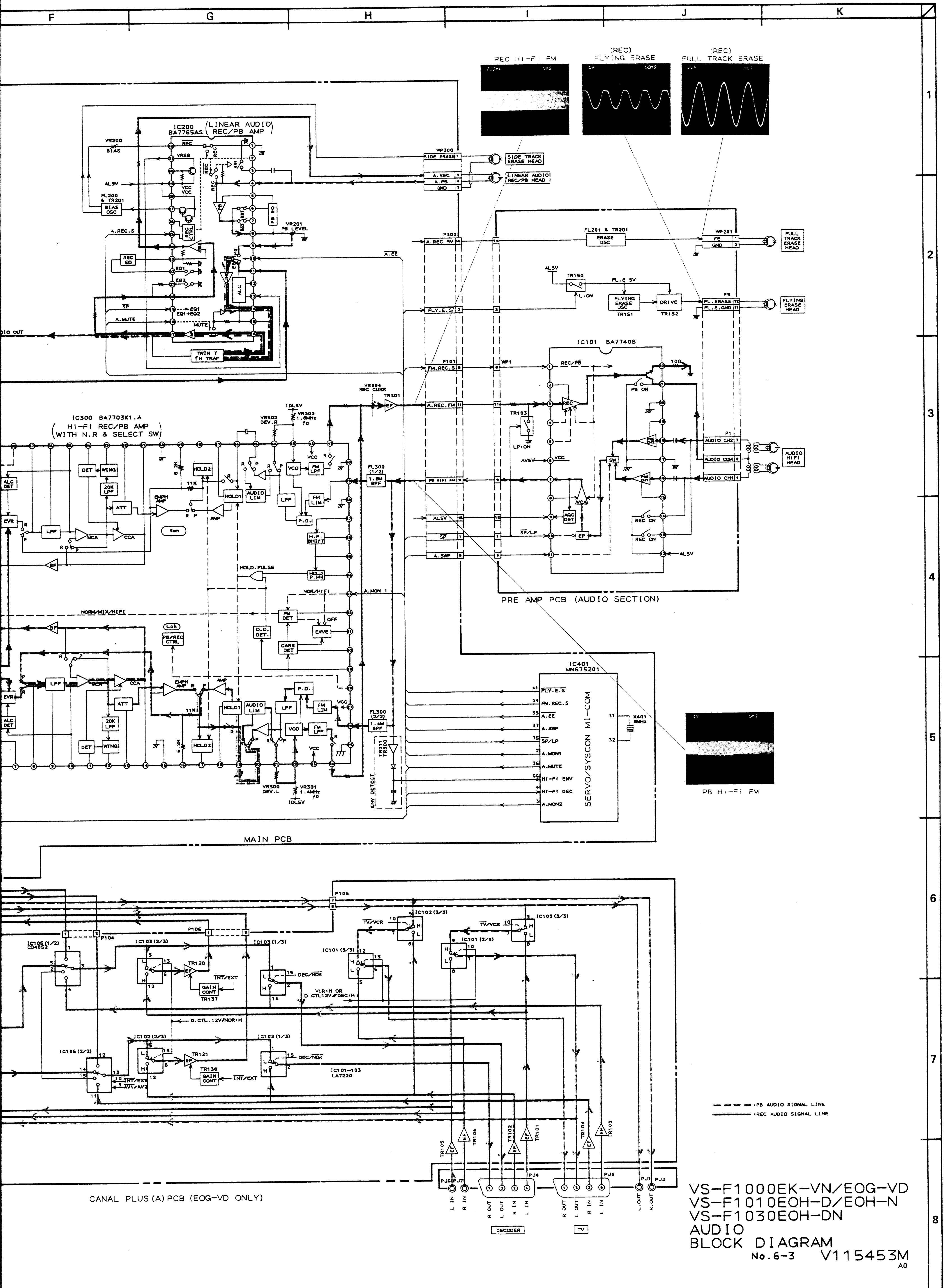
D
E
F
G
H
I
I.HQ OUT (PB)
I.HQ IN (PB)
CCD IN (PB)
MAIN DE-EMPHA (PB)
CCD OUT (PB)
UPPER: PB HPF OUT (LOWER: V OUT)
UPPER: REC I-HQ SIGNAL LOWER: V OUT
UPPER: PB I-HQ SIGNAL LOWER: V OUT
UPPER: PB HF AMP OUT (LOWER: V OUT)
PB 1st V.C.L OUT
CANAL PLUS
TV
V IN
V OUT
PJ3
CANAL PLUS (A) PCB (EOG ONLY)
TR701
EF
MIX
VARIABLE DETAIL ENHANCER
VARIABLE NOISE CANCELLER
EE ON
TR702
IC700 (2/7)
AMP
TR703
PB ON
PB:ON
PHASE CORRECT
C720, R740
TR712
IC700 (1/7)
V.SWP
TR612
SP
2fsc
CLK
CCD 1H DELAY
IC770 LC8992
FV770 5MHz LPF
VR770
CCD LEVEL
TR711
VR601 CARRIER
VR600 DEV
MAIN EMPH.
N.L.MIX
SP/EP FM C.I.
LIM.
H.P.F.
PB.ON
CLAMP
SP/LP SW
L.N.C.MIX N.R.PREAMP
D.O.C
SUB STRUCTER
N.L.PREAMP.
MAIN DE EMPH
(PEAKING CONT)
TR608
SP:ON
AL5V
REF
IC700 (6/7, 7/7) (LOWER)
TR710, 711 (UPPER)
TR704
MAIN VIDEO SIGNAL
PB:0.6MHz EE:1MHz C710
HPF
TR706~709
HF AMP
VOLTAGE CONTROLLED LIMITER
V.REF 1
V.REF 2
TR705
EE:ON
NFB WITH NON LINEAR LIMITER
THRESHOLD LEVEL CONT
IC701 (1/2)
12V
6V
ANC VR (PWM)
IC701 (2/2) NJM4558S
IC700 (3/7) LB1215
I-HQ CIRCUIT
SUB CLAMP
ON SCREEN MUTE
VIDEO AMP.
L.P.F.
N.C.MIX
PICT.CTL
PB C-MIX
D.E.MIX
PRE AMP.
MUTE
D.E. OFF
EE/PB
FL600 3MHz LPF
VR604 PB LEVEL
(EE/PB SELECT)
TR606
AFC.H SYNC
VP
LPF
PICTURE CONT
EE (D-EMPHA.OFF)
TR815
TR883
IC880 BA10393N (C.DET COMPARATOR)
1.1V (V.REF)
C.DET
WP601
VIDEO IN
GND
IMS V OUT
P107
P112
P104
IC101 LA7220
IC108 MM1031
6dB AMP
IC104 (2/3)
VCR:H OR D CTL12V/ DEC:H
TV/VCR
IC106 LA7954
AV1/AV2
INT/EXT
TR139
D CTL12V/ NOR:H
IC104 (3/3) LA7220
P108
EOG ONLY RED
C.ROT
TR812
TR814
X800 4.43MHz
DL800 2H DELAY COMB FILTER
TR881
TR882, 884, D882 HIGH CHROMA LEVEL DETECT
IC870 BA7025L (SECAM DETECTOR)
BGP
TR872
PB 5V
S.W.
FL870 4.16M BPF
LIM
DET
COMP1
COMP2
REG
TO OPERATION PCB
EOG ONLY
XO OUT
VCC
VIDEO IN
ATT
BGP1
BGP2
3RD LOCK PROTECTER
KILLER
ACC DET
PB AMP B.DE-EM KILLER
B.G.
FSI
SIG DET
6dB AMP
BURST EMPH.
MAIN CONV.
CARR LEAK DET.
N/P/S DET
PB 627K IN
GND
4.43M OUT
BYPASS
4.43M IN
ACC FIL
N/P/S CTL
PAL
EK ONLY JS816
FL800 (3/3) 4.43MHz BPF
TR804
TR805
TR806
TR803
TR802
LPF
TR800, 801 PEAKING OR GAIN CONT
VIDEO PCB
EXCEPT EK
TR506
SECAM ON
CHROMA BY-PASS
IC501 μPD6450CX (CHARACTER GENERATOR)
S.DATA
CLK
STB
SYNC
V.IN
V.OUT
TR505
TR504
VJ:ON
TR503
CLAMP
AFC H.SYNC
V SYNC
TR510
SYNC SEPARATOR WITH AFC
IC502 MM1068XS
AFC H SYNC
TR613
TR614
TR609
TR610 2.55V CLAMP
TR611
V SYNC DET
APL DET
APL REF
C.DET
LNC
B/W
TUNE
C.ROT
IC401 MN675201 (SERVO/SYS-CON MI-COM)
WP2
ANT IN
A IN
RF OUT
RF CONVERTOR
TV TUNER
VIF UNIT
V.OUT
WF1
MAIN PCB
IC1
VAS2
IC102 (1/3) LA7220
TR105
IC103 LA7220 (1/3)
P109
RJW
PJ9
SAT
IN-OUT (A)
F OUT
PB 4.43M BPF OUT
PB CHROMA OUT
PB COMB FILTER OUT
COMP IN (SECAM)
COMP IN (PAL)
BURST SIGNAL (SECAM)
BURST SIGNAL (PAL)
APL REFERENCE
V SYNC DET (PB)


CCD OUT (PB)
UPPER: PB HPF OUT (LOWER: V OUT)
UPPER: REC I-HQ SIGNAL LOWER: V OUT
UPPER: PB I-HQ SIGNAL LOWER: V OUT
UPPER: PB HF AMP OUT (LOWER: V OUT)
PB 1st V.C.L OUT
UPPER: PB 2nd V.C.L OUT LOWER: V OUT
VIDEO OUT
CANAL PLUS (B) PCB (EOG ONLY)
TV
DECODER
EXT
PJ3
PJ4
PJ5
CANAL PLUS (A) PCB (EOG ONLY)
MIX
VARIABLE DETAIL ENHANCER
VARIABLE NOISE CANCELLER
EE ON
TR702
IC700 (2/7)
TR703
PB ON
PB: ON
PHASE CORRECT C720, R740
TR712
IC700 (1/7)
REF
IC700 (6/7, 7/7) (LOWER)
TR710, 711 (UPPER)
MAIN VIDEO SIGNAL
PB: 0.6MHz EE: 1MHz C710
HPF
TR706~709
HF AMP
VOLTAGE CONTROLLED LIMITER
V.REF 1
V.REF 2
TR705
EE: ON
NFB WITH NON LINEAR LIMITER
THRESHOLD LEVEL CONT
IC701 (1/2)
IC700 (3/7) LB1215
IC701 (2/2) NJM4558S
I-HQ CIRCUIT
TR110~112
BUFFER AMP
IC101 LA7220
IC108 MM1031
6dB AMP
VCR: H OR D CTL12V/ DEC: H
IC104 (2/3)
TV/VCR
IC106 LA7954
AV1/AV2
INT/EXT
DEC/NOR
IC107 LA7220 (1/3)
F.V.SW
IDL12V
TR139
EF
D CTL12V/ NOR: H
IC104 (3/3) LA7220
P107
P112
P104
P108
P109
WP601
VIDEO IN 1
GND 2
GND 3
IMS V OUT 4
IC880 BA10393N (DET COMPARATOR)
AL5V
1.1V (V.REF)
C.DET
D884, D882 CHROMA LEVEL DETECT
PB 5V
EXCEPT EK
TR506
SECAM ON
CHROMA BY-PASS
IC501 μPD6450CX (CHARACTER GENERATOR)
TR505
S.DATA CLK STB
V.IN
V.OUT
SYNC
TR504
VJ: ON
TR503 CLAMP
AFC H.SYNC
V SYNC
TR510
SYNC SEPARATOR WITH AFC
IC502 MM1068XS
AFC H SYNC
TR613
LPF
TR614
TR609
TR610 2.55V CLAMP
TR611
BGP
V SYNC DET
APL DET
APL REF
C.DET
LNC
B/W
TUNE
C.ROT
IC401 MN675201 (SERVO/SYS-CON MI-COM)
TO OPERATION PCB
EOG ONLY
RED
BLUE
GREEN
VPST /PDC PCB
WP1 PJ1
V IN
FRONT PCB
P106
RJW
IC106 LVA521S
INT/EXT
IC102 (1/3) LA7220
AV1/AV2
IC101 LA7220 (1/3)
IN-OUT (B) PCB (EXCEPT EOG)
TR105
IC103 LA7220 (1/3)
TV/VCR
IC104 MM1031
6dB AMP
WP2
ANT IN
A IN
RF OUT
RF CONVERTOR
TX TUNER
VIF UNIT
V.OUT
WF1
MAIN PCB
PJ9
PJ8
PJ1
SAT
TV
EXT
IN-OUT (A) PCB (EXCEPT EOG)
IMS VIDEO OUT (PB)
AFC H SYNC
AFC V SYNC
APL DETECT
VIDEO IN
VIDEO OUT (PB)
COMP IN (PAL)
BURST SIGNAL (SECAM)
BURST SIGNAL (PAL)
APL REFERENCE
V SYNC DET (PB)
PB Y SIGNAL LINE
REC Y SIGNAL LINE
PB CHROMA SIGNAL LINE
REC CHROMA SIGNAL LINE

VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
VIDEO
BLOCK DIAGRAM
No.6-2 V115452M
A01


A
B
C
D
E
1
2
3
4
5
6
7
8
D-MULTI PCB (EOG-VD, EOH-D ONLY)
IC1 IR3P72
SIF(5.5MHz) LIMITTER DETECTION
DE-EMPHASIS (50uS)
DISCRIMINATOR
NOISE DETECTOR
MONO/MONO CANCEL
AM DETECTION
BPF 274.1Hz
NOISE AMP
BPF (3.5fH)
BPF 117.5Hz
PHASE COMPARATOR
VCO (196Hz)
SIF(5.74MHz) LIMITTER DETECTION
MUTE
MATRIX
LED DRIVER
VR7 SEPARATION
VR6 OUTPUT LEVEL
FL2 5.5MHz
FL1 5.74MHz
IDL10V
FR22 39Ω
PILOT B.P.F
STEREO DET
BILINGUAL DET
MONO CANCEL
VCO
SIF IN
GND
N.C
TV MODE
AL 5V
AL 12V
L-CH OUT
R-CH OUT
NICAM PCB (EK, EOH-DN/N ONLY)
IC3 SAA7322GP 16bits D/A CONVERTOR & LPF
IC2 CF70124 NICAM728 PCM DECODER
IC1 TDA8732 QPSK DEMODULATOR
EK:6.552MHz EOH:5.85MHz
BPF
CLK PLL
CARR PLL
D.MULTI FORCED MONO
IC4 M5218
FROM D-MULTI SECTION (EOH-ON ONLY)
(NICAM SECAM ONLY)
D.GND
D.AL5V
C4
NICAM/FM
FM MONO
OPERATION PCB
IC1 M38173M6-FP (OPERATION MI-COM)
FL1 FLD BAR METER
T.MUTE
A.DET.L
A.DET.R
NOR/DEC
INT/EXT
AV1/AV2
IC301 BA6138
METER DRIVE
VR305
VR306 METER LEVEL ADJ
VR PCB
R-CH VR
L-CH VR
V.REF
VR.L
VR.R
SOUND IF OUT
VIF UNIT
TUNER
ANT IN
RF CONVERTOR
RF OUT
AUDIO IN
VIDEO IN
NICAM ONLY
TR205 T MUTE
EXCEPT EOG-VD
INT:ON MIC:OFF
TR212
MIC:ON
EXT:ON MIC:OFF
TR202
A.MON 2
OUT PUT SW CTRL
MUTE DR
12dB MAP
MIX
VCR
BIAS
TR302 MUTE TR303
TR308, 309 MUTE DRIVE
HIFI DEC.
A.MUTE
V.REF
INPUT SW
BIL/SAP
TU/SC/LINE
INT/EXT
TR305 MUTE
TR304 MUTE
TR306, 307 MUTE DRIVE
EOG-VD ONLY
IN-OUT (B) PCB (EXCEPT EOG-VD)
IC101~103: LA7220
IC103 (2/3)
IC103 (3/3)
IC102 (2/3)
IC102 (3/3)
IC101 (3/3)
IC101 (2/3)
TV/VCR
AV1/AV2
TR102
TR101
IC105 BA3308 MIC AMP
IC201 BA3308 MIC AMP
IDL12V
F.A.SW
F.L.IN
F.R.IN
TR127
TR126
IC107 (2/3)
IN-OUT (A) PCB (EXCEPT EOG-VD)
FRONT PCB
MIC IN
+12V
L.OUT
R.OUT
TV R OUT
TV L OUT
SAT R.IN
SAT L.IN
L.IN
R.IN
PJ5
PJ3
PJ8
PJ9
PJ4
PJ2
TR5
TR6
TR4
TR3


D
E
F
G
H
I
REC HI-FI FM
IC200 BA7765AS (LINEAR AUDIO REC/PB AMP)
VR200 BIAS
AL9V
FL200 & TR201
BIAS OSC
A.REC.S
REC EQ
SP
A.MUTE
MUTE
TWIN T FH TRAP
ALC
VR201 PB LEVEL
PB EQ
WP200
SIDE ERASE
A.REC
A.PB
GND
SIDE TRACK ERASE HEAD
LINEAR AUDIO REC/PB HEAD
P300
A.REC 9V
FLY.E.S
A.EE
FL201 &
ERASE OSC
AL5V
TR150
L:ON
IC101
P101
FM.REC.S
A.REC.FM
REC/PB
WP1
TR103
LP:ON
AV5V
VCC
PB HIFI FM
AL5V
SP
A.SWP
SP/LP
AGC DET
VCA
EP
PRE AMP PCB (AUDIO
P1
SIF IN
GND
SOUND IF OUT
J1
N.C
TV MODE
AL 5V
AL 12V
L-CH OUT
R-CH OUT
VIF UNIT
TUNER
ANT IN
RF OUT
RF CONVERTOR
AUDIO IN
VIDEO IN
NICAM ONLY
IC23
R227
EXCEPT EOG-VD
NICAM ONLY
TR205
T MUTE
INT:ON MIC:OFF
TR203
LINER AUDIO OUT
TR212
MIC:ON
EXT:ON MIC:OFF
TR202
IC300 BA7703K1.A
HI-FI REC/PB AMP (WITH N.R & SELECT SW)
A.MON 2
OUT PUT SW CTRL
MUTE DR
OUTPUT SW
12dB MAP
MIX
ALC DET
EVR
LPF
MCA
CCA
DET
WING
20K LPF
ATT
EMPH AMP
HOLD2
HOLD1
AUDIO LIM
VCO
FM LPF
FM LIM
P.D.
H.P. SHIFT
HOLD.PULSE
HOLD3 P.MM
NOR/HIFI
FM DET
ENVE
CARR DET
O.O. DET.
A.MON 1
NORM/MIX/HIFI
Rch
Lch
PB/REC CTRL
BIAS
HIFI DEC.
V.REF
INPUT SW
BIL/SAP
TU/SC/LINE
INT/EXT
VR302 DEV.R
IDL5V
VR303 1.8MHz f0
VR304 REC CURR
TR301
FL300 (1/2) 1.8M BPF
FL300 (2/2) 1.4M BPF
VR300 DEV.L
VR301 1.4MHz f0
ENV DETECT
TR211 TR300
TR302
TR303
TR308, 309 MUTE DRIVE
A.MUTE
C351
EOG-VD ONLY
P406
T.MUTE
P301
IC301 BA6138
VR305
VR306 METER LEVEL ADJ
METER DRIVE
P371
EXCEPT EOG-VD
TU.R IN
TU.L IN
VR.R
R-CH LINE IN
VR.L
L-CH LINE IN
TR305 MUTE
TR304 MUTE
TR306, 307 MUTE DRIVE
MAIN PCB
IC401 MN675201
FLY.E.S
FM.REC.S
A.EE
A.SWP
SP/LP
A.MON1
A.MUTE
HI-FI ENV
HI-FI DEC
A.MON2
SERVO/SYSCON MI-COM
D.GND
D.AL5V
C4
NICAM/FM
TV MODE
AL5V
FM MONO
AL12V
L-CH OUT
GND
R-CH OUT
WP3
P201
MIC SW
WF300
EOG-VD ONLY
WF1
WF300
P106
P104
WP101
BA3308
MIC AMP
IC201 BA3308
P110
P109
F.L.IN
P113
F.A.SW
F.R.IN
TR127
IC107 (1/3) LA7220
IDL12V
TR126
IC107 (2/3)
IC105 (1/2) CD4052
IC105 (2/2)
INT/EXT
AV1/AV2
IC103 (2/3)
TR120
GAIN CONT TR137
IC103 (1/3)
DEC/NOR
V(R:H OR D CTL12V/DEC:H
D.CTL.12V/NOR:H
IC102 (2/3)
TR121
TR138 GAIN CONT
IC102 (1/3)
IC101 (3/3)
IC102 (3/3)
TV/VCR
IC101 (2/3)
IC103 (3/3)
IC101~103 LA7220
(G-VD)
FRONT PCB
+12V
R.IN
L.IN
MIC IN
TR105
TR106
TR102
TR101
TR104
PJ6
PJ7
PJ4
L IN
R IN
R OUT
L OUT
R IN
L IN
DECODER
TV
CANAL PLUS (A) PCB (EOG-VD ONLY)


F
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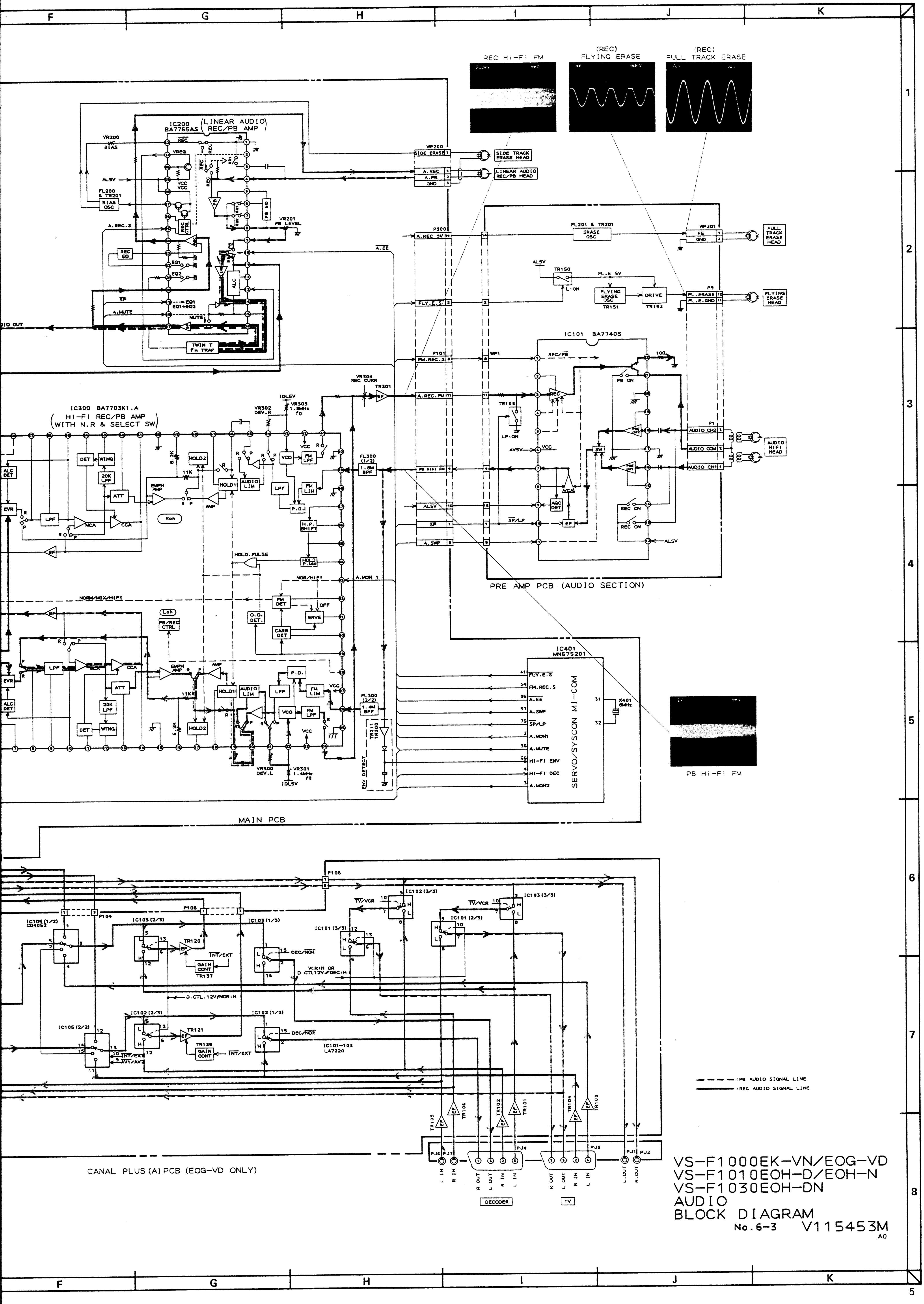
REC Hi-Fi FM
(REC) FLYING ERASE
(REC) FULL TRACK ERASE
PB Hi-Fi FM
IC200 BA7765AS (LINEAR AUDIO REC/PB AMP)
VR200 BIAS
AL9V
FL200 & TR201
BIAS OSC
A.REC.S
REC EQ
EQ1
EQ2
SP
A.MUTE
MUTE
ALC
PB EQ
REC CTRL
VR201 PB LEVEL
TWIN T fH TRAP
AUDIO OUT
WP200
SIDE ERASE
A.REC
A.PB
GND
SIDE TRACK ERASE HEAD
LINEAR AUDIO REC/PB HEAD
P300
A.REC 9V
A.EE
FLY.E.S
FL201 & TR201
ERASE OSC
WP201
FE
FULL TRACK ERASE HEAD
AL5V
TR150
FL.E 5V
L:ON
FLYING ERASE OSC
TR151
DRIVE
TR152
P9
FL.ERASE
FL.E.GND
FLYING ERASE HEAD
IC101 BA7740S
P101
FM.REC.S
WP1
REC/PB
A.REC.FM
TR103
LP:ON
AVSV
VCC
PB ON
P1
AUDIO CH2
AUDIO COM
AUDIO CH1
AUDIO HIFI HEAD
SW
VCA
AGC DET
EP
REC ON
PB HIFI FM
ALSV
SP
A.SWP
SP/LP
PRE AMP PCB (AUDIO SECTION)
IC300 BA7703K1.A
Hi-Fi REC/PB AMP (WITH N.R & SELECT SW)
VR304 REC CURR
TR301
EF
IDL5V
VR303 1.8MHz f0
VR302 DEV.R
FL300 (1/2) 1.8M BPF
ALC DET
EVR
LPF
MCA
CCA
DET
WTNG
20K LPF
ATT
EMPH AMP
HOLD2
HOLD1
AUDIO LIM
VCO
FM LPF
FM LIM
P.D.
H.P. SHIFT
HOLD PULSE
HOLD P.MM
NOR/HIFI
A.MON 1
NORM/MIX/HIFI
FM DET
OFF
ENVE
D.O. DET.
CARR DET
Rch
Lch
PB/REC CTRL
BF
AMP
11K
8.2K
6.2K
FL300 (2/2) 1.4M BPF
TR211 TR300
ENV DETECT
VR300 DEV.L
VR301 1.4MHz f0
IC401 MN675201
FLY.E.S
FM.REC.S
A.EE
A.SWP
SP/LP
A.MON1
A.MUTE
HI-FI ENV
HI-FI DEC
A.MON2
SERVO/SYSCON MI-COM
X401 8MHz
MAIN PCB
P106
P104
IC105 (1/2) CD4052
IC103 (2/3)
TR120
INT/EXT
GAIN CONT
TR137
IC103 (1/3)
DEC/NOR
VCR:H OR D CTL12V/DEC:H
IC101 (3/3)
IC102 (3/3)
TV/VCR
IC101 (2/3)
IC103 (3/3)
O.CTL.12V/NOR:H
IC105 (2/2)
IC102 (2/3)
TR121
TR138
GAIN CONT
INT/EXT
AV1/AV2
IC102 (1/3)
DEC/NOX
IC101~103 LA7220
PB AUDIO SIGNAL LINE
REC AUDIO SIGNAL LINE
TR105
TR106
TR102
TR101
TR104
TR103
PJ6
PJ7
PJ4
PJ3
PJ1
PJ2
L IN
R IN
R OUT
L OUT
R IN
L IN
DECODER
TV
L OUT
R OUT
CANAL PLUS (A) PCB (EOG-VD ONLY)

VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
AUDIO
BLOCK DIAGRAM
No.6-3 V115453M
A0


F
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J
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6
7
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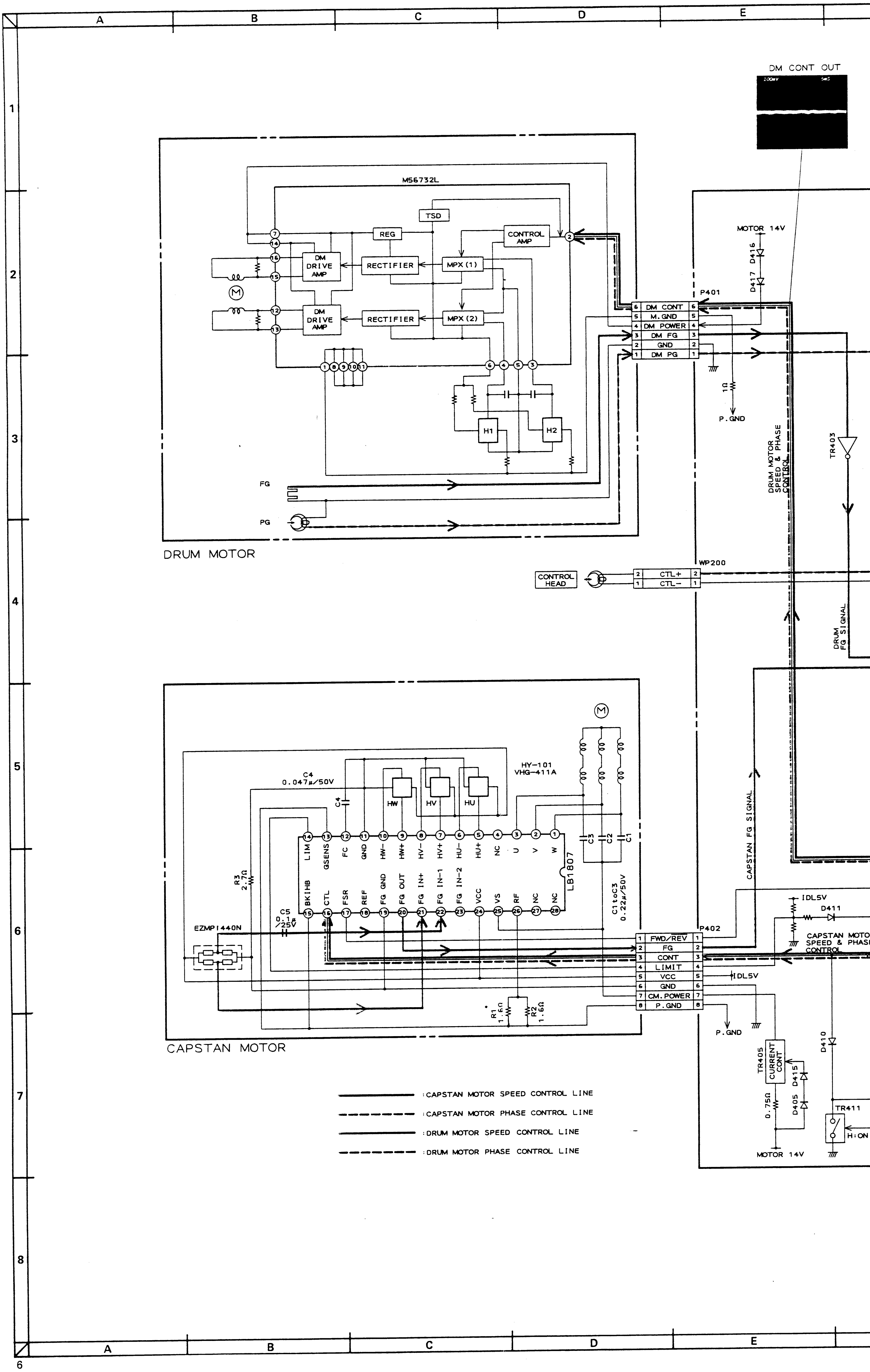
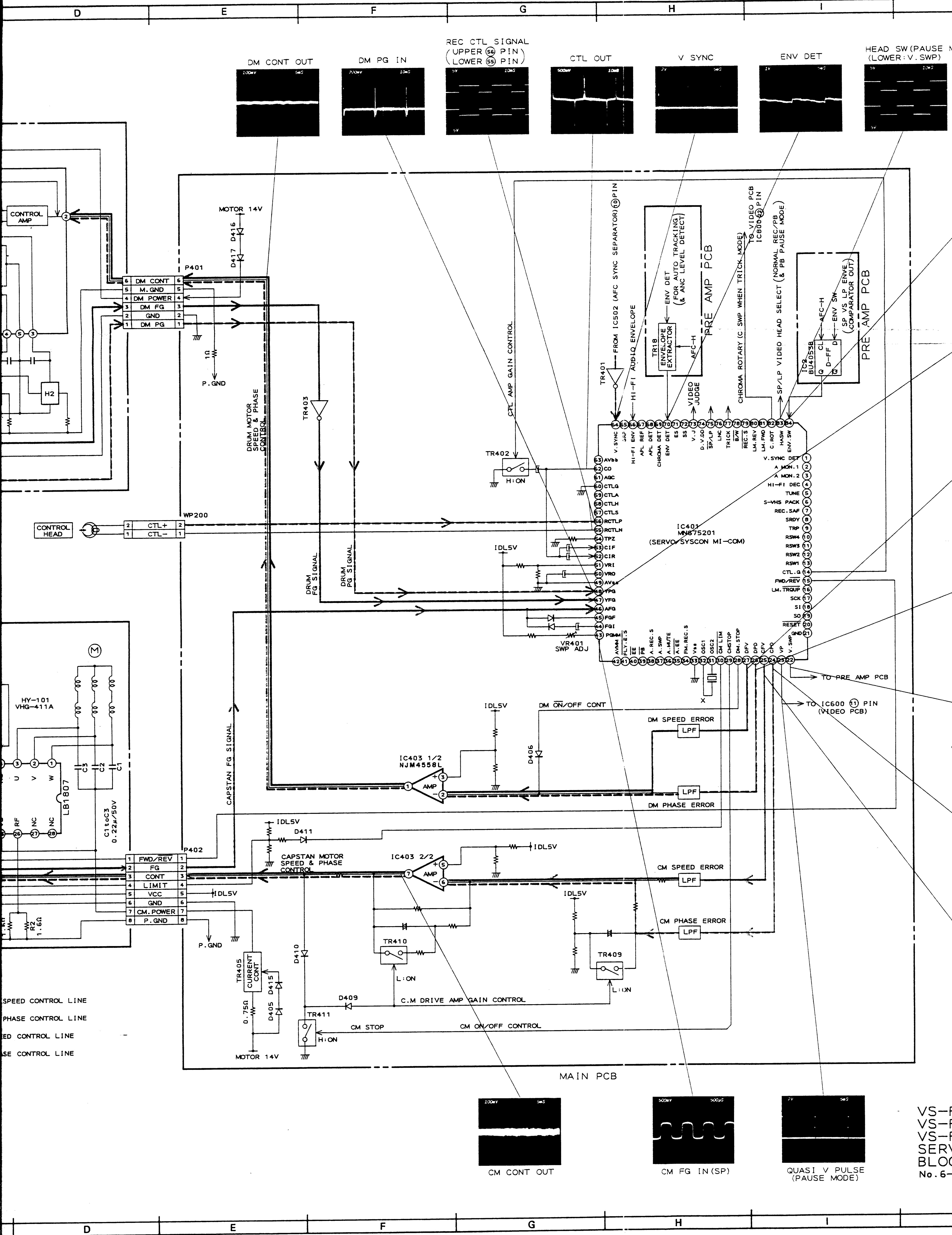
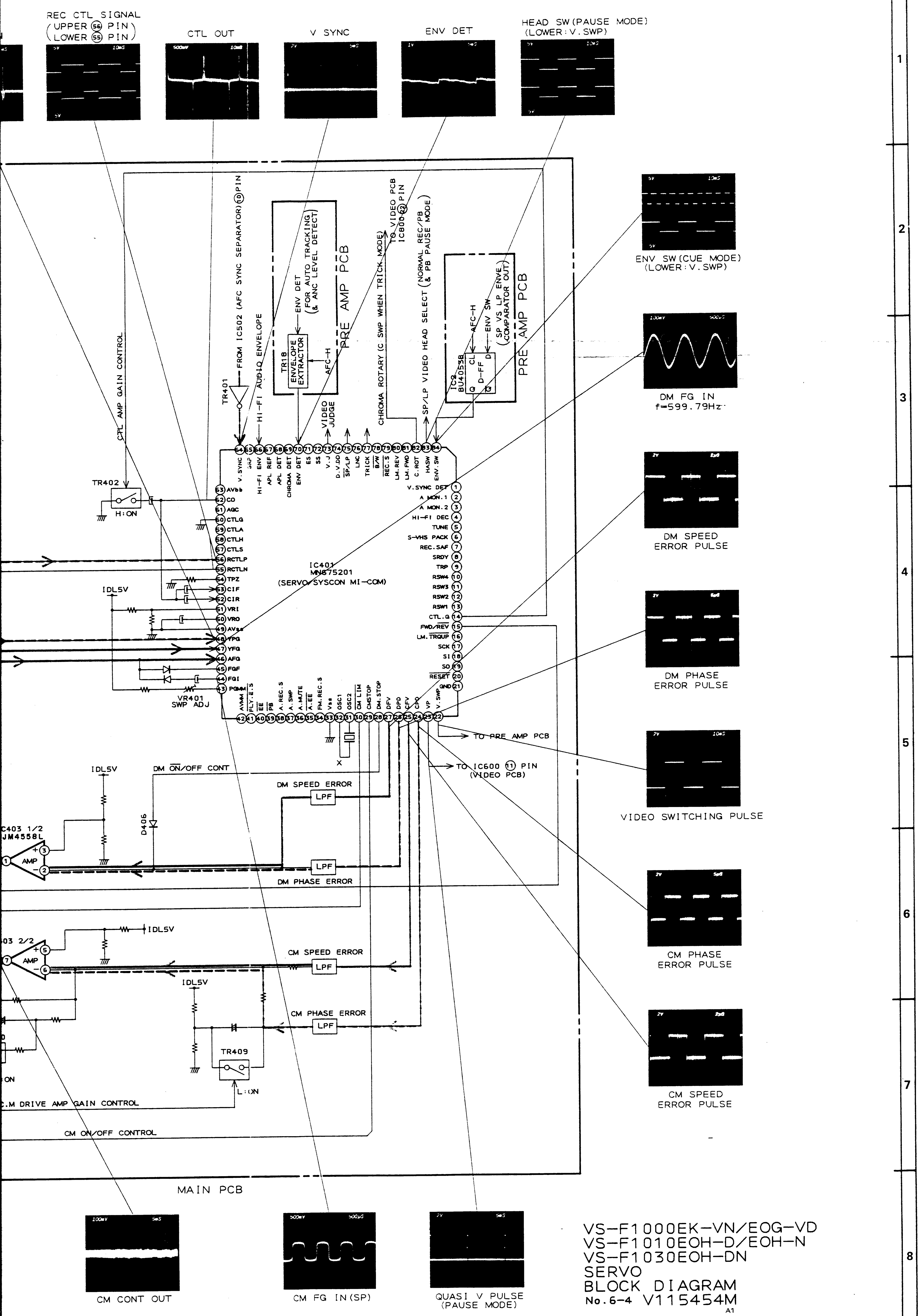
REC Hi-Fi FM
(REC)
FLYING ERASE
(REC)
FULL TRACK ERASE
IC200
BA7765AS
(LINEAR AUDIO REC/PB AMP)
VR200
BIAS
AL9V
FL200 & TR201
BIAS OSC
A.REC.S
REC EQ
EQ1
EQ2
SP
A.MUTE
MUTE
TWIN T fH TRAP
ALC
PB EQ
VR201
PB LEVEL
REC CTRL
VREG
VCC
A.EE
WP200
SIDE ERASE
A.REC
A.PB
GND
SIDE TRACK ERASE HEAD
LINEAR AUDIO REC/PB HEAD
P300
A.REC 9V
FLY.E.S
FM.REC.S
A.REC.FM
PB HIFI FM
AL9V
SP
A.SWP
FL201 & TR201
ERASE OSC
WP201
FE
GND
FULL TRACK ERASE HEAD
TR150
L:ON
FL.E 5V
FLYING ERASE OSC
TR151
DRIVE
TR152
P9
FL.ERASE
FL.E.GND
FLYING ERASE HEAD
IC101 BA7740S
REC/PB
PB ON
TR103
LP:ON
AV5V
VCC
SW
AGC DET
VCA
EP
SP/LP
REC ON
P1
AUDIO CH2
AUDIO COM
AUDIO CH1
AUDIO HIFI HEAD
P101
WP1
PRE AMP PCB (AUDIO SECTION)
IC300 BA7703K1.A
Hi-Fi REC/PB AMP
(WITH N.R & SELECT SW)
VR304
REC CURR
TR301
IDL5V
VR303
1.8MHz f0
VR302
DEV.R
HOLD2
HOLD1
AUDIO LIM
VCO
FM LPF
FM LIM
LPF
P.D.
H.P. SHIFT
HOLD.PULSE
HOLD P.M.M
NOR/HIFI
FM DET
OFF
ENVE
D.O. DET.
CARR DET
A.MON 1
FL300 (1/2)
1.8M BPF
FL300 (2/2)
1.4M BPF
TR211 TR300
ENV DETECT
DET
WTNG
20K LPF
ATT
EMPH AMP
MCA
CCA
AMP
ALC DET
EVR
BF
Rch
Lch
PB/REC CTRL
NORM/MIX/HIFI
VR300
DEV.L
VR301
1.4MHz f0
IDL5V
IO OUT
IC401
MN675201
SERVO/SYSCON MI-COM
FLY.E.S
FM.REC.S
A.EE
A.SWP
SP/LP
A.MON1
A.MUTE
HI-FI ENV
HI-FI DEC
A.MON2
X401
8MHz
PB Hi-Fi FM
MAIN PCB
P106
P104
IC105 (1/2)
CD4052
IC103 (2/3)
TR120
INT/EXT
GAIN CONT
TR137
IC103 (1/3)
DEC/NOR
VCR:H OR
D CTL12V/DEC:H
D.CTL.12V/NOR:H
IC101 (3/3)
IC102 (3/3)
TV/VCR
IC101 (2/3)
IC103 (3/3)
IC105 (2/2)
IC102 (2/3)
TR121
TR138
GAIN CONT
IC102 (1/3)
IC101~103
LA7220
AV1/AV2
TR105
TR106
TR102
TR101
TR104
TR103
EF
PJ6
PJ7
PJ4
PJ3
PJ1
PJ2
L IN
R IN
R OUT
L OUT
R IN
L IN
L OUT
R OUT
DECODER
TV
CANAL PLUS (A) PCB (EOG-VD ONLY)
:PB AUDIO SIGNAL LINE
:REC AUDIO SIGNAL LINE

VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
AUDIO
BLOCK DIAGRAM
No.6-3 V115453M
A0

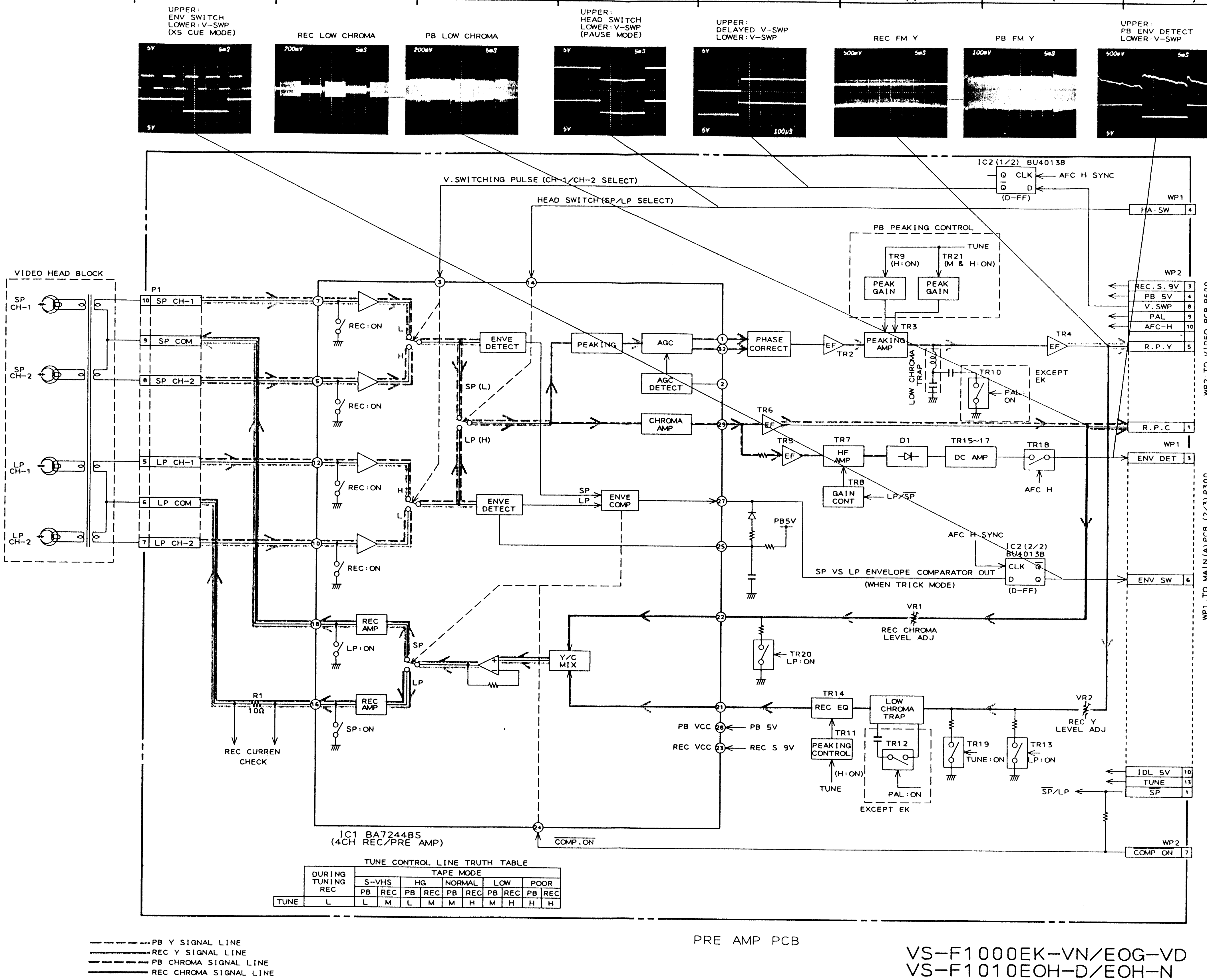

A
B
C
D
E
1
2
3
4
5
6
7
8
DM CONT OUT
M56732L
TSD
REG
CONTROL AMP
DM DRIVE AMP
RECTIFIER
MPX (1)
MPX (2)
H1
H2
FG
PG
DRUM MOTOR
MOTOR 14V
D416
D417
P401
DM CONT
M.GND
DM POWER
DM FG
GND
DM PG
1Ω
P.GND
DRUM MOTOR SPEED & PHASE CONTROL
TR403
WP200
CONTROL HEAD
CTL+
CTL−
DRUM FG SIGNAL
HY-101
VHG-411A
C4
0.047µ/50V
HW
HV
HU
LIM
GSENS
FC
GND
HW−
HW+
HV−
HV+
HU−
HU+
NC
U
V
W
BKIHB
CTL
FSR
REF
FG GND
FG OUT
FG IN+
FG IN−1
FG IN−2
VCC
VS
RF
NC
NC
LB1807
C3
C2
C1
C1toC3
0.22µ/50V
R3
2.7Ω
C5
0.1µ
/25V
EZMP1440N
R1
1.6Ω
R2
1.6Ω
CAPSTAN FG SIGNAL
P402
FWD/REV
FG
CONT
LIMIT
VCC
GND
CM.POWER
P.GND
IDL5V
D411
CAPSTAN MOTO
SPEED & PHAS
CONTROL
D410
TR405
CURRENT CONT
D415
D405
0.75Ω
TR411
H:ON
MOTOR 14V
CAPSTAN MOTOR
:CAPSTAN MOTOR SPEED CONTROL LINE
:CAPSTAN MOTOR PHASE CONTROL LINE
:DRUM MOTOR SPEED CONTROL LINE
:DRUM MOTOR PHASE CONTROL LINE


D
E
F
G
H
I
DM CONT OUT
DM PG IN
REC CTL SIGNAL
(UPPER 56 PIN
LOWER 55 PIN)
CTL OUT
V SYNC
ENV DET
HEAD SW(PAUSE M
(LOWER:V.SWP)
CONTROL AMP
H2
P401
DM CONT
M.GND
DM POWER
DM FG
GND
DM PG
MOTOR 14V
D416
D417
1Ω
P.GND
DRUM MOTOR SPEED & PHASE CONTROL
TR403
DRUM FG SIGNAL
DRUM PG SIGNAL
CTL AMP GAIN CONTROL
TR402
H:ON
FROM IC502 (AFC SYNC SEPARATOR) 10 PIN
TR401
HI-FI AUDIO ENVELOPE
TR18
ENVELOPE EXTRACTOR
ENV DET (FOR AUTO TRACKING & ANC LEVEL DETECT)
AFC-H
PRE AMP PCB
VIDEO JUDGE
CHROMA ROTARY (C SWP WHEN TRICK MODE)
TO VIDEO PCB IC800 22 PIN
SP/LP VIDEO HEAD SELECT (NORMAL REC/PB & PB PAUSE MODE)
IC9 BU4053B
CL
D-FF
AFC-H
ENV SW
(SP VS LP ENVE COMPARATOR OUT)
PRE AMP PCB
WP200
CONTROL HEAD
CTL+
CTL-
IDL5V
IC401
MN675201
(SERVO/SYSCON MI-COM)
V.SYNC
SEP
HI-FI ENV
APL REF
APL DET
CHROMA DET
ENV DET
ES
SS
V.J
D.V.DO
SP/LP
LNC
TRICK
B/W
REC.S
LM.REV
LM.FWD
C.ROT
HASW
ENV.SW
V.SYNC DET 1
A MON.1 2
A MON.2 3
HI-FI DEC 4
TUNE 5
S-VHS PACK 6
REC.SAF 7
SRDY 8
TRP 9
RSW4 10
RSW3 11
RSW2 12
RSW1 13
CTL.G 14
FWD/REV 15
LM.TRQUP 16
SCK 17
SI 18
SO 19
RESET 20
GND 21
63 AVDD
62 CO
61 AGC
60 CTLG
59 CTLA
58 CTLH
57 CTLS
56 RCTLP
55 RCTLN
54 TPZ
53 CIF
52 CIR
51 VRI
50 VRO
49 AVSS
48 YPG
47 YFG
46 AFG
45 FGF
44 FGI
43 PGMM
AVMM
FLY.E.S
EE
PB
A.REC.S
A.SWP
A.MUTE
A.EE
FM.REC.S
VSS
OSC1
OSC2
CM LIM
CMSTOP
DM.STOP
DFV
DPO
CFV
CPO
VP
V.SWP
X
VR401 SWP ADJ
TO PRE AMP PCB
TO IC600 11 PIN (VIDEO PCB)
IDL5V
DM ON/OFF CONT
DM SPEED ERROR
LPF
D406
IC403 1/2
NJM4558L
AMP
DM PHASE ERROR
M
HY-101
VHG-411A
U
V
W
C3
C2
C1
LB1807
C1toC3
0.22μ/50V
RF
NC
NC
CAPSTAN FG SIGNAL
P402
FWD/REV
FG
CONT
LIMIT
VCC
GND
CM.POWER
P.GND
R2
1.6Ω
D411
CAPSTAN MOTOR SPEED & PHASE CONTROL
IC403 2/2
CM SPEED ERROR
CM PHASE ERROR
TR410
L:ON
TR409
L:ON
D410
D409
C.M DRIVE AMP GAIN CONTROL
TR405
CURRENT CONT
D415
D405
0.75Ω
TR411
H:ON
CM STOP
CM ON/OFF CONTROL
MOTOR 14V
SPEED CONTROL LINE
PHASE CONTROL LINE
ED CONTROL LINE
SE CONTROL LINE
MAIN PCB
CM CONT OUT
CM FG IN(SP)
QUASI V PULSE
(PAUSE MODE)

VS-F
VS-F
VS-F
SERV
BLOC
No.6-


G
H
I
J
K
1
2
3
4
5
6
7
8
REC CTL SIGNAL (UPPER ⑯ PIN LOWER ⑮ PIN)
CTL OUT
V SYNC
ENV DET
HEAD SW (PAUSE MODE) (LOWER: V. SWP)
ENV SW (CUE MODE) (LOWER: V. SWP)
DM FG IN f=599.79Hz
DM SPEED ERROR PULSE
DM PHASE ERROR PULSE
VIDEO SWITCHING PULSE
CM PHASE ERROR PULSE
CM SPEED ERROR PULSE
CM CONT OUT
CM FG IN (SP)
QUASI V PULSE (PAUSE MODE)
FROM IC502 (AFC SYNC SEPARATOR) ⑩ PIN
HI-FI AUDIO ENVELOPE
TR401
TR18 ENVELOPE EXTRACTOR
ENV DET (FOR AUTO TRACKING & ANC LEVEL DETECT)
AFC-H
PRE AMP PCB
VIDEO JUDGE
CHROMA ROTARY (C SWP WHEN TRICK MODE)
TO VIDEO PCB IC800 ㉒ PIN
SP/LP VIDEO HEAD SELECT (NORMAL REC/PB & PB PAUSE MODE)
IC2 BU4053B
CL D-FF D Q Q̄
ENV SW
SP VS LP ENVE COMPARATOR OUT
CTL AMP GAIN CONTROL
TR402
H: ON
IC401 MN675201 (SERVO SYSCON MI-COM)
V.SYNC SRP HI-FI ENV APL REF APL DET CHROMA DET ENV DET ES SS V.J D.V.DD SP/LP LNC TRICK B/W REC.S LM.REV LM.FWD C.ROT HASW ENV.SW
AVbb CO AGC CTLG CTLA CTLH CTLS RCTLP RCTLN TPZ CIF CIR VRI VRO AVss YPG YFG AFG FGF FGI PGMM
V.SYNC DET A MON.1 A MON.2 HI-FI DEC TUNE S-VHS PACK REC.SAF SRDY TRP RSW4 RSW3 RSW2 RSW1 CTL.G FWD/REV LM.TRQUP SCK SI SO RESET GND
AVMM FLY.E.S EE PB A.REC.S A.SWP A.MUTE A.EE FM.REC.S Vss OSC1 OSC2 CM LIM CMSTOP DM.STOP DFV DPD CFV CPD VP V.SWP
IDL5V
VR401 SWP ADJ
X
TO PRE AMP PCB
TO IC600 ⑪ PIN (VIDEO PCB)
DM ON/OFF CONT
DM SPEED ERROR
DM PHASE ERROR
LPF
D406
IC403 1/2 NJM4558L
AMP
403 2/2
CM SPEED ERROR
CM PHASE ERROR
TR409
L: ON
C.M DRIVE AMP GAIN CONTROL
CM ON/OFF CONTROL
MAIN PCB

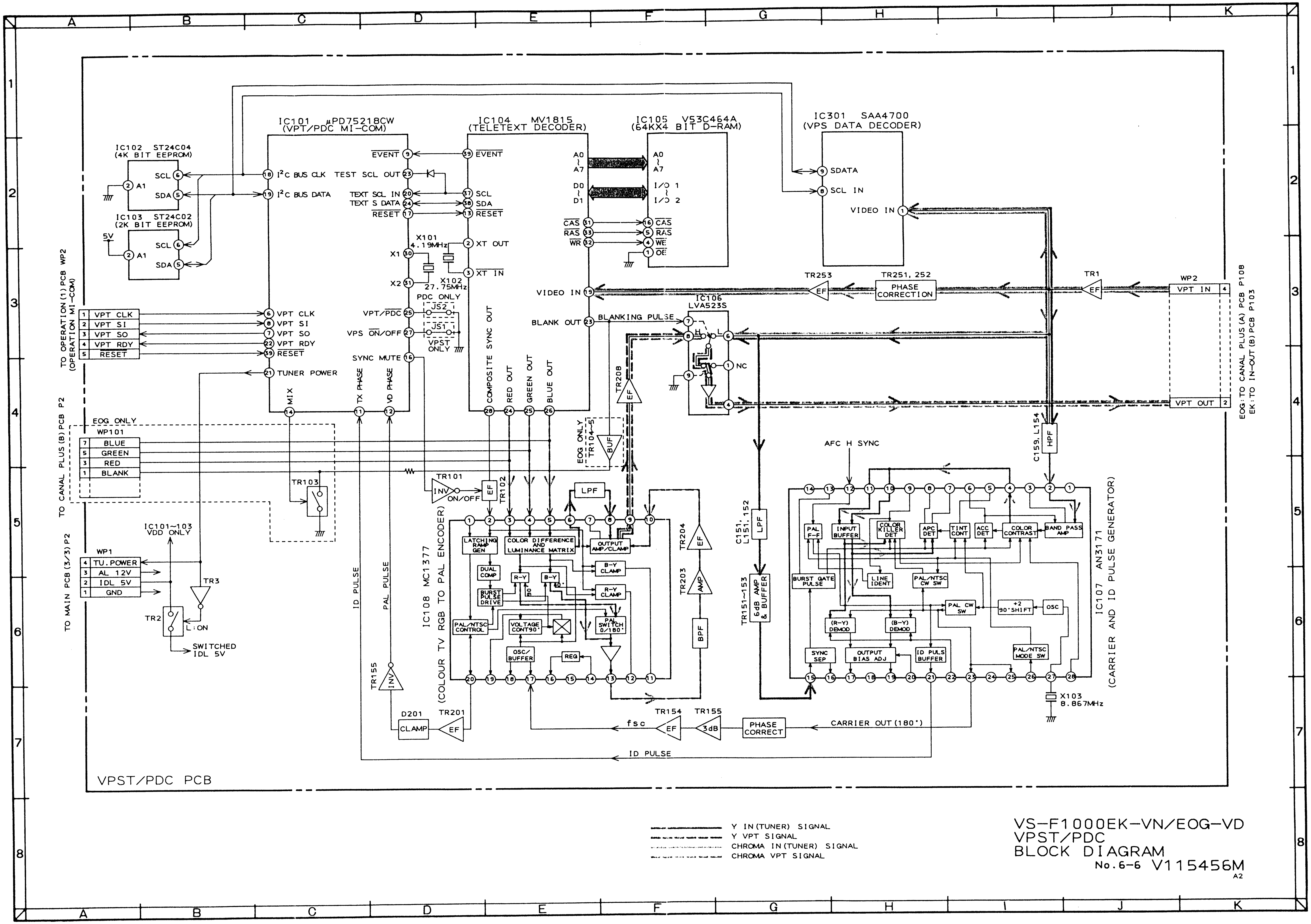
VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
SERVO
BLOCK DIAGRAM
No.6-4 V115454M
A1


UPPER: ENV SWITCH
LOWER: V-SWP
(X5 CUE MODE)
REC LOW CHROMA
PB LOW CHROMA
UPPER: HEAD SWITCH
LOWER: V-SWP
(PAUSE MODE)
UPPER: DELAYED V-SWP
LOWER: V-SWP
REC FM Y
PB FM Y
UPPER: PB ENV DETECT
LOWER: V-SWP
5V
5mS
200mV
100μS
500mV
100mV
400mV
IC2(1/2) BU4013B
Q
CLK
D
(D-FF)
AFC H SYNC
V.SWITCHING PULSE (CH-1/CH-2 SELECT)
HEAD SWITCH(SP/LP SELECT)
WP1
HA·SW 4
PB PEAKING CONTROL
TUNE
TR9 (H:ON)
TR21 (M & H:ON)
PEAK GAIN
PEAK GAIN
TR3
WP2
REC.S.9V 3
PB 5V 4
V.SWP 8
PAL 9
AFC-H 10
R.P.Y 5
WP2: TO VIDEO PCB P600
VIDEO HEAD BLOCK
SP CH-1
SP CH-2
LP CH-1
LP CH-2
P1
10 SP CH-1
9 SP COM
8 SP CH-2
5 LP CH-1
6 LP COM
7 LP CH-2
REC:ON
L
H
SP (L)
LP (H)
ENVE DETECT
PEAKING
AGC
AGC DETECT
PHASE CORRECT
EF
TR2
PEAKING AMP
TR4
LOW CHROMA TRAP
TR10
PAL: ON
EXCEPT EK
CHROMA AMP
TR6
TR5
TR7
HF AMP
D1
TR15~17
DC AMP
TR18
AFC H
TR8
GAIN CONT
LP/SP
R.P.C 1
ENV DET 3
WP1: TO MAIN (A) PCB (2/3) P300
SP
LP
ENVE COMP
PB5V
AFC H SYNC
IC2(2/2) BU4013B
CLK
D
Q
(D-FF)
SP VS LP ENVELOPE COMPARATOR OUT
(WHEN TRICK MODE)
ENV SW 6
VR1
REC CHROMA LEVEL ADJ
REC AMP
LP:ON
SP:ON
Y/C MIX
TR20 LP:ON
R1 10Ω
REC CURREN CHECK
TR14
REC EQ
LOW CHROMA TRAP
TR11
PEAKING CONTROL
(H:ON)
TUNE
TR12
PAL:ON
EXCEPT EK
TR19
TUNE:ON
TR13
LP:ON
VR2
REC Y LEVEL ADJ
PB VCC
PB 5V
REC VCC
REC S 9V
IDL 5V 10
TUNE 13
SP 1
SP/LP
WP2
COMP ON 7
COMP.ON
IC1 BA7244BS
(4CH REC/PRE AMP)
1 32 2 29 27 25 22 21 28 23 24 3 14 7 5 12 10 18 16
PB Y SIGNAL LINE
REC Y SIGNAL LINE
PB CHROMA SIGNAL LINE
REC CHROMA SIGNAL LINE
PRE AMP PCB
A B C D E F G H I J K
1 2 3 4 5 6 7 8

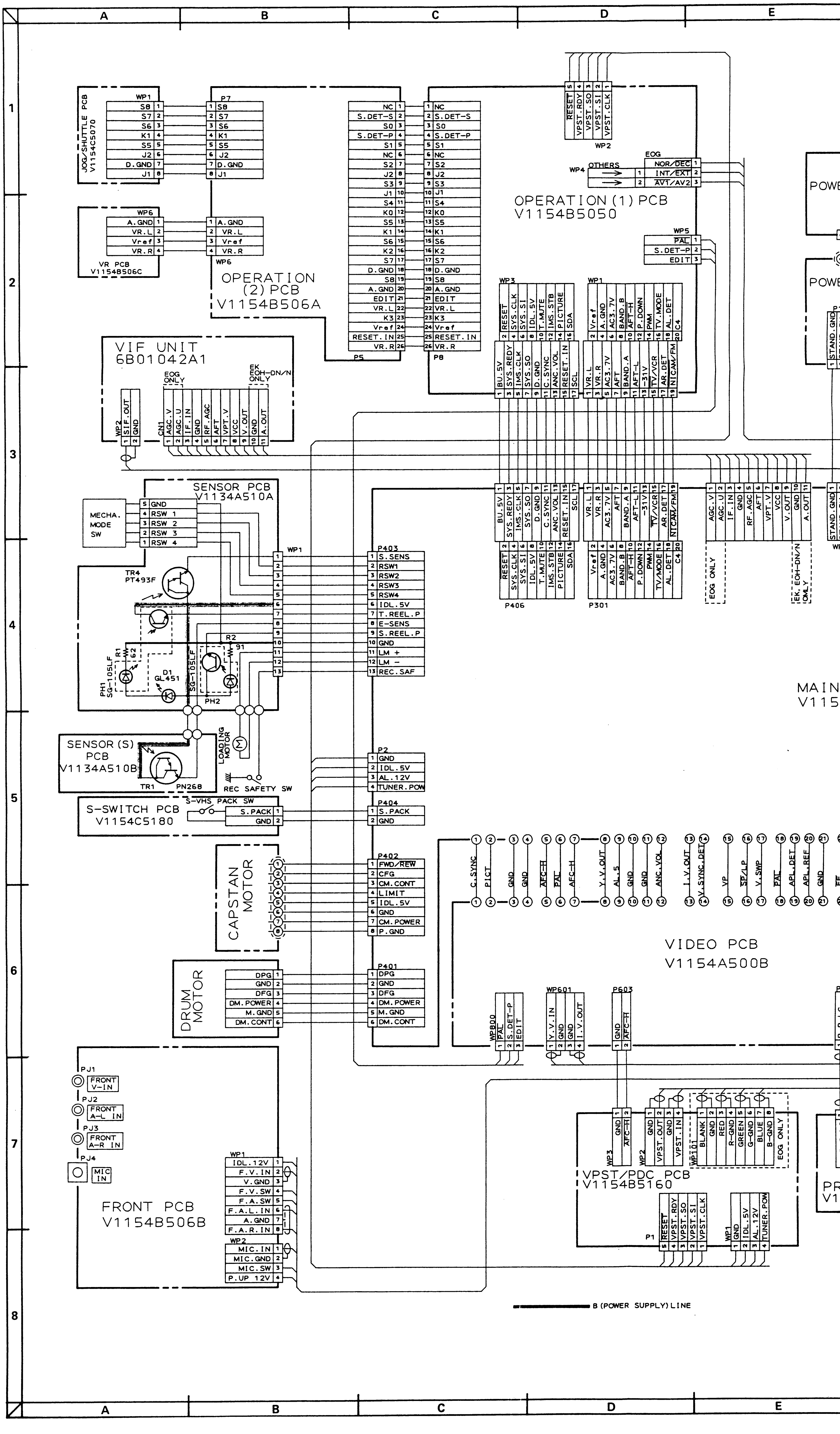
TUNE CONTROL LINE TRUTH TABLE

	DURING TUNING REC	TAPE MODE									
		S-VHS		HG		NORMAL		LOW		POOR	
		PB	REC	PB	REC	PB	REC	PB	REC	PB	REC
TUNE	L	L	M	L	M	M	H	M	H	H	H

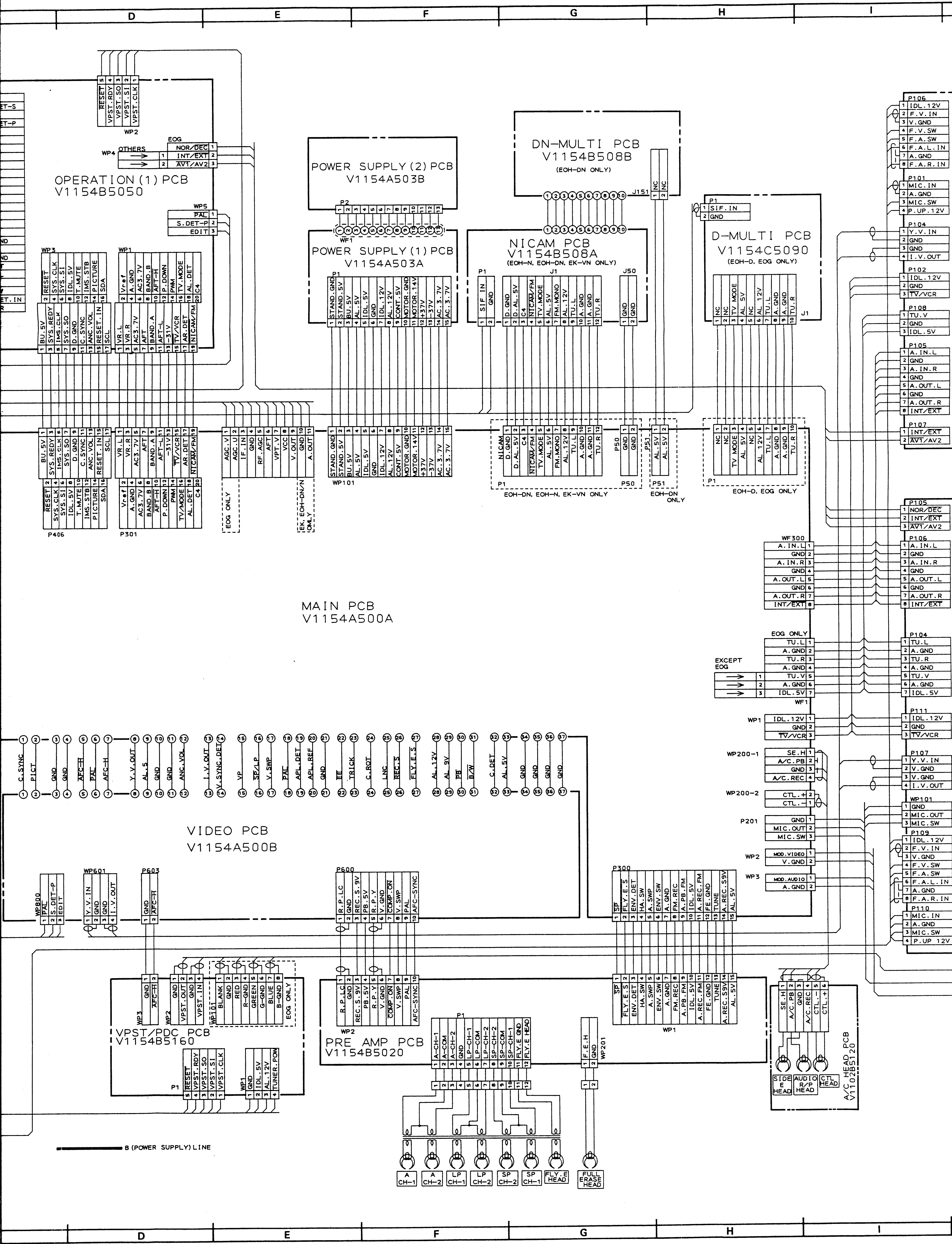
VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
PRE AMP
(VIDEO SECTION)
BLOCK DIAGRAM
No.6-5 V115455M
A2


IC101 μPD75218CW (VPT/PDC MI-COM)
IC102 ST24C04 (4K BIT EEPROM)
IC103 ST24C02 (2K BIT EEPROM)
SCL
SDA
A1
5V
EVENT
I²C BUS CLK
I²C BUS DATA
TEST SCL OUT
TEXT SCL IN
TEXT S DATA
RESET
X1
X2
X101 4.19MHz
X102 27.75MHz
PDC ONLY
JS2
JS1
VPST ONLY
VPT/PDC
VPS ON/OFF
SYNC MUTE
VPT CLK
VPT SI
VPT SO
VPT RDY
TUNER POWER
MIX
TX PHASE
VD PHASE
IC104 MV1815 (TELETEXT DECODER)
XT OUT
XT IN
VIDEO IN
BLANK OUT
COMPOSITE SYNC OUT
RED OUT
GREEN OUT
BLUE OUT
A0 ~ A7
D0 ~ D1
CAS
RAS
WR
IC105 V53C464A (64KX4 BIT D-RAM)
I/O 1 ~ I/O 2
WE
OE
IC301 SAA4700 (VPS DATA DECODER)
SDATA
SCL IN
VIDEO IN
TR253
EF
TR251, 252
PHASE CORRECTION
TR1
WP2
VPT IN
VPT OUT
EOG:TO CANAL PLUS (A) PCB P108
EK:TO IN-OUT (B) PCB P103
BLANKING PULSE
IC106 LVA523S
H
L
NC
TR208
EOG ONLY
TR104~5
BUF
C159, L154
HPF
AFC H SYNC
TO OPERATION (1) PCB WP2 (OPERATION MI-COM)
TO CANAL PLUS (B) PCB P2
EOG ONLY
WP101
BLUE
GREEN
RED
BLANK
TR103
TO MAIN PCB (3/3) P2
WP1
TU. POWER
AL 12V
IDL 5V
GND
IC101~103 VDD ONLY
TR3
TR2
L:ON
SWITCHED IDL 5V
TR101
INV
ON/OFF
TR102
IC108 MC1377 (COLOUR TV RGB TO PAL ENCODER)
LATCHING RAMP GEN
COLOR DIFFERENCE AND LUMINANCE MATRIX
OUTPUT AMP/CLAMP
LPF
DUAL COMP
R-Y
B-Y
90°
0°
B-Y CLAMP
R-Y CLAMP
BURST PULSE DRIVE
PAL/NTSC CONTROL
VOLTAGE CONT90°
PAL SWITCH 0/180°
OSC/BUFFER
REG
TR204
TR203
AMP
BPF
C151, L151, 152
TR151~153
6dB AMP & BUFFER
ID PULSE
PAL PULSE
TR155
D201
CLAMP
TR201
fsc
TR154
3dB
PHASE CORRECT
CARRIER OUT (180°)
IC107 AN3171 (CARRIER AND ID PULSE GENERATOR)
PAL F-F
INPUT BUFFER
COLOR KILLER DET
APC DET
TINT CONT
ACC DET
COLOR CONTRAST
BAND PASS AMP
BURST GATE PULSE
LINE IDENT
PAL/NTSC CW SW
PAL CW SW
÷2 90°SHIFT
OSC
(R-Y) DEMOD
(B-Y) DEMOD
SYNC SEP
OUTPUT BIAS ADJ
ID PULS BUFFER
PAL/NTSC MODE SW
X103 8.867MHz
VPST/PDC PCB
Y IN (TUNER) SIGNAL
Y VPT SIGNAL
CHROMA IN (TUNER) SIGNAL
CHROMA VPT SIGNAL
A B C D E F G H I J K
1 2 3 4 5 6 7 8

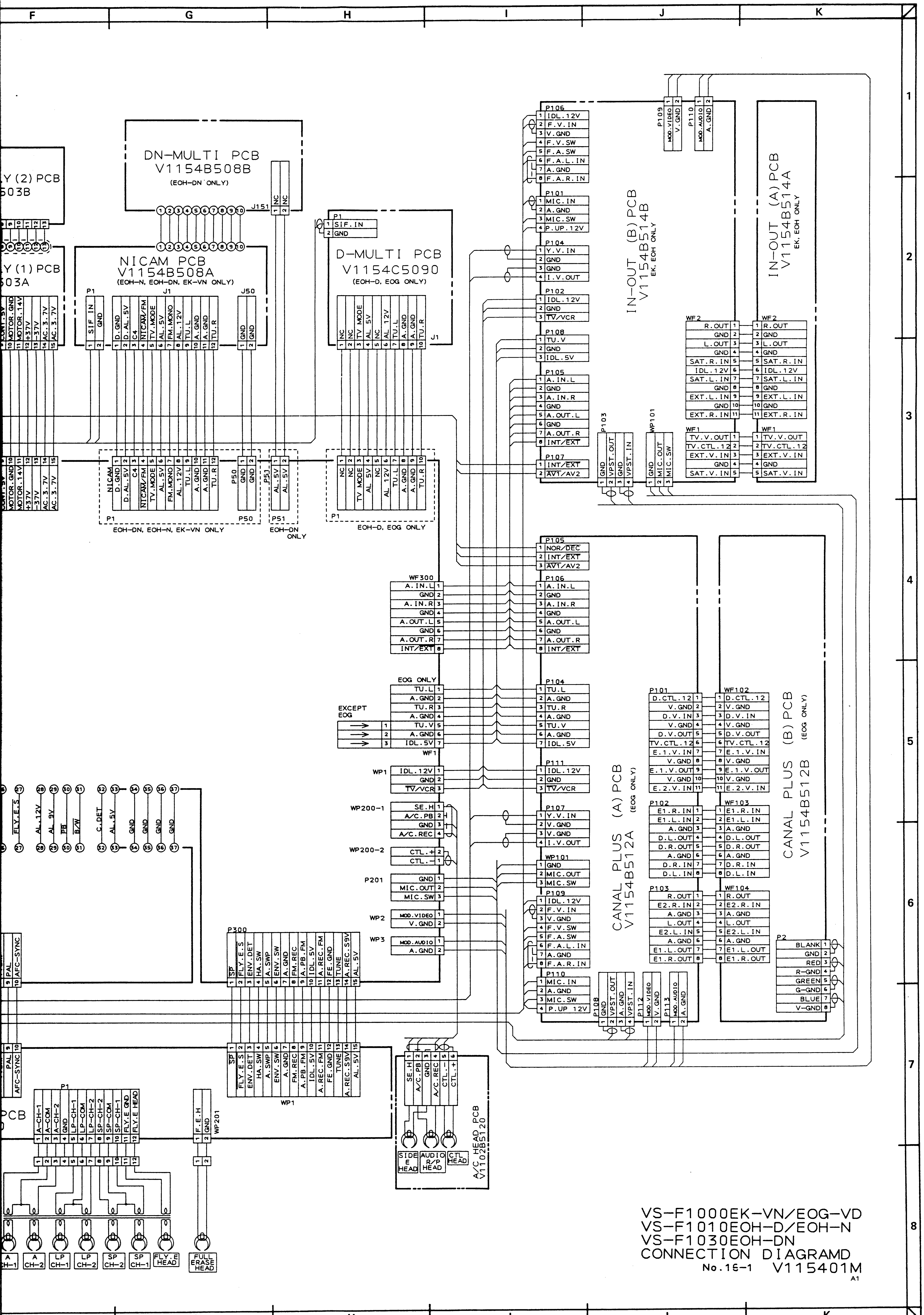
VS-F1000EK-VN/EOG-VD
VPST/PDC
BLOCK DIAGRAM
No.6-6 V115456M
A2



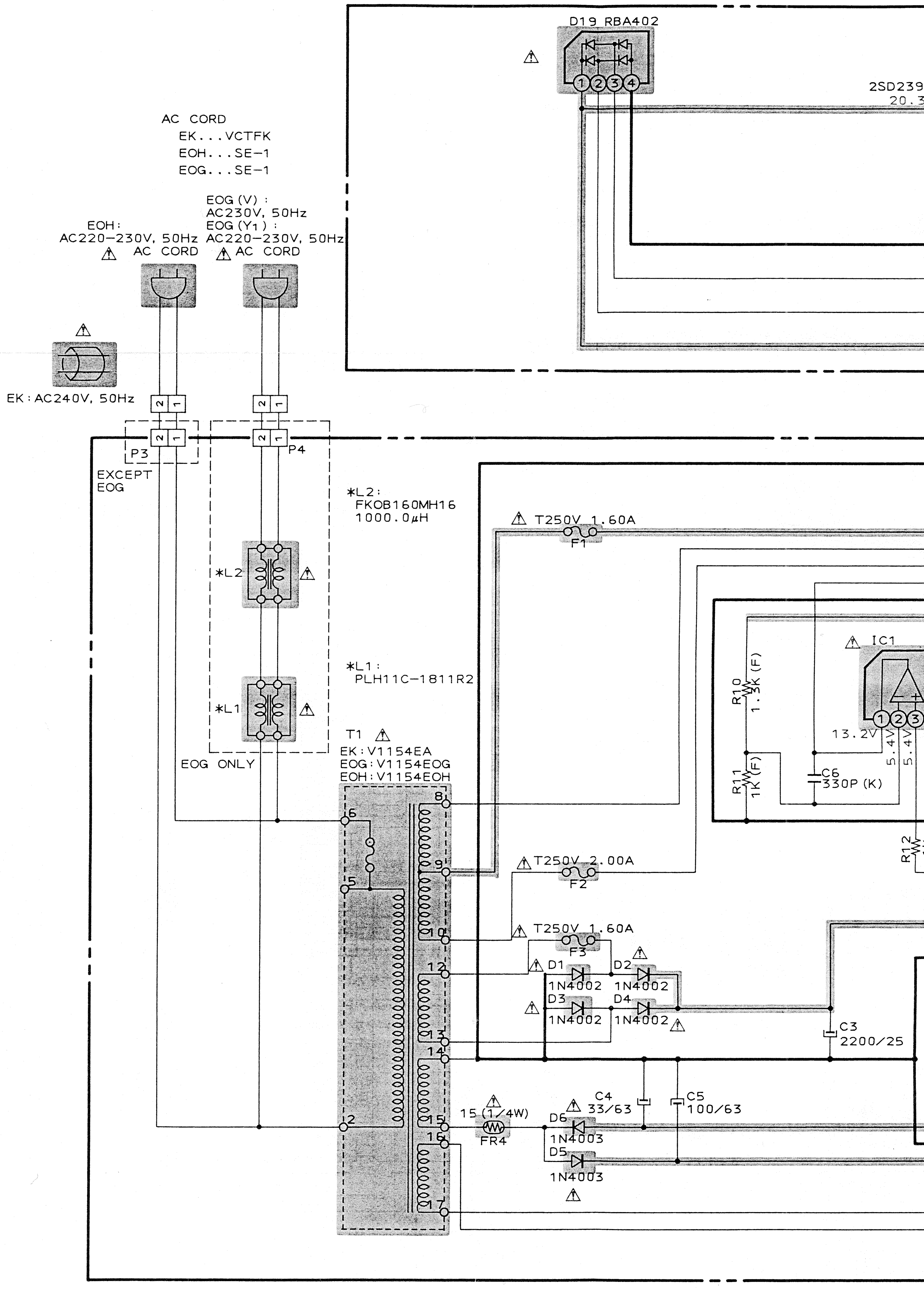
A
B
C
D
E
1
2
3
4
5
6
7
8
JOG/SHUTTLE PCB V1154C5070
WP1
S8
S7
S6
K1
S5
J2
D.GND
J1
P7
VR PCB V1154B506C
WP6
A.GND
VR.L
Vref
VR.R
OPERATION (2) PCB V1154B506A
P5
NC
S.DET-S
S0
S.DET-P
S1
NC
S2
J2
S3
J1
S4
K0
S5
K1
S6
K2
S7
D.GND
S8
A.GND
EDIT
VR.L
K3
Vref
RESET.IN
VR.R
P8
WP2
RESET
VPST.RDY
VPST.SO
VPST.SI
VPST.CLK
WP4
OTHERS
EOG
NOR/DEC
INT/EXT
AV1/AV2
OPERATION (1) PCB V1154B5050
WP5
PAL
S.DET-P
EDIT
POWE
WP3
RESET
SYS.CLK
SYS.SI
IDL.5V
T.MUTE
IMS.STB
PICTURE
SDA
BU.5V
SYS.REDY
IMS.CLK
SYS.SO
D.GND
C.SYNC
ANC.VOL
RESET.IN
SCL
Vref
A.GND
AC3.7V
BAND.B
AFT-H
P.DOWN
TV.MODE
AL.DET
C4
VR.L
VR.R
AFT
BAND.A
AFT-L
-31V
PWM
TV/VCR
AR.DET
NICAM/FM
P406
P301
VIF UNIT 6B01042A1
EOG ONLY
EK EOH-DN/N ONLY
SIF.OUT
GND
CN1
AGC.V
AGC.U
IF.IN
RF.AGC
VPT.V
VCC
V.OUT
A.OUT
STAND.GND
SENSOR PCB V1134A510A
MECHA. MODE SW
RSW 1
RSW 2
RSW 3
RSW 4
TR4 PT493F
PH1 SG-105LF
R1 62
D1 GL451
R2 91
PH2
P403
S.SENS
RSW1
RSW2
RSW3
RSW4
IDL.5V
T.REEL.P
E-SENS
S.REEL.P
GND
LM +
LM -
REC.SAF
SENSOR (S) PCB V1134A510B
TR1 PN268
LOADING MOTOR
REC SAFETY SW
P2
GND
IDL.5V
AL.12V
TUNER.POW
S-SWITCH PCB V1154C5180
S-VHS PACK SW
S.PACK
P404
MAIN
V115
CAPSTAN MOTOR
P402
FWD/REW
CFG
CM.CONT
LIMIT
CM.POWER
P.GND
C.SYNC
PICT
AFC-H
PAL
Y.V.OUT
AL.5
ANC.VOL
I.V.OUT
V.SYNC.DET
VP
SP/LP
V.SWP
APL.DET
APL.REF
VIDEO PCB V1154A500B
DRUM MOTOR
P401
DPG
DFG
DM.POWER
M.GND
DM.CONT
WP800
WP601
Y.V.IN
P603
PJ1 FRONT V-IN
PJ2 FRONT A-L IN
PJ3 FRONT A-R IN
PJ4 MIC IN
FRONT PCB V1154B506B
IDL.12V
F.V.IN
V.GND
F.V.SW
F.A.SW
F.A.L.IN
A.GND
F.A.R.IN
MIC.IN
MIC.GND
MIC.SW
P.UP 12V
VPST.OUT
VPST.IN
BLANK
RED
R-GND
GREEN
G-GND
BLUE
B-GND
VPST/PDC PCB V1154B5160
P1
PR
V1
B (POWER SUPPLY) LINE



D
E
F
G
H
I
OPERATION (1) PCB
V1154B5050
WP2
RESET
VPST.RDY
VPST.SO
VPST.SI
VPST.CLK
EOG
WP4
OTHERS
NOR/DEC
INT/EXT
AVT/AV2
WP5
PAL
S.DET-P
EDIT
WP3
RESET
SYS.CLK
SYS.SI
IDL.5V
T.MUTE
IMS.STB
PICTURE
SDA
BU.5V
SYS.REDY
IMS.CLK
SYS.SO
D.GND
C.SYNC
ANC.VOL
RESET.IN
SCL
WP1
Vref
A.GND
AC3.7V
BAND.B
AFT-H
P.DOWN
PWM
TV.MODE
AL.DET
C4
VR.L
VR.R
AC3.7V
AFT
BAND.A
AFT-L
-31V
TV/VCR
AR.DET
NICAM/FM
P406
P301
POWER SUPPLY (2) PCB
V1154A503B
P2
WF1
POWER SUPPLY (1) PCB
V1154A503A
P1
STAND.GND
STAND.5V
BU.5V
AL.5V
IDL.5V
GND
IDL.12V
AL.12V
CONT.5V
MOTOR.GND
MOTOR.14V
+37V
-37V
AC.3.7V
AC.3.7V
WP101
DN-MULTI PCB
V1154B508B
(EOH-DN ONLY)
J151
NC
NC
NICAM PCB
V1154B508A
(EOH-N, EOH-DN, EK-VN ONLY)
P1
SIF.IN
GND
J1
D.GND
D.AL.5V
C4
NICAM/FM
TV.MODE
AL.5V
FM.MONO
AL.12V
TU.L
A.GND
A.GND
TU.R
J50
GND
GND
P50
P51
AL.5V
AL.5V
EOH-DN, EOH-N, EK-VN ONLY
EOH-DN ONLY
P1
SIF.IN
GND
D-MULTI PCB
V1154C5090
(EOH-D, EOG ONLY)
NC
NC
TV MODE
AL 5V
NC
AL 12V
TU.L
A.GND
A.GND
TU.R
J1
EOH-D, EOG ONLY
AGC.V
AGC.U
IF.IN
GND
RF.AGC
AFT
VPT.V
VCC
V.OUT
GND
A.OUT
EOG ONLY
EK, EOH-DN/N ONLY
P106
IDL.12V
F.V.IN
V.GND
F.V.SW
F.A.SW
F.A.L.IN
A.GND
F.A.R.IN
P101
MIC.IN
A.GND
MIC.SW
P.UP.12V
P104
Y.V.IN
GND
GND
I.V.OUT
P102
IDL.12V
GND
TV/VCR
P108
TU.V
GND
IDL.5V
P105
A.IN.L
GND
A.IN.R
GND
A.OUT.L
GND
A.OUT.R
INT/EXT
P107
INT/EXT
AVT/AV2
P105
NOR/DEC
INT/EXT
AVT/AV2
WF300
A.IN.L
GND
A.IN.R
GND
A.OUT.L
GND
A.OUT.R
INT/EXT
P106
A.IN.L
GND
A.IN.R
GND
A.OUT.L
GND
A.OUT.R
INT/EXT
MAIN PCB
V1154A500A
EOG ONLY
TU.L
A.GND
TU.R
A.GND
TU.V
A.GND
IDL.5V
EXCEPT EOG
WF1
P104
TU.L
A.GND
TU.R
A.GND
TU.V
A.GND
IDL.5V
WP1
IDL.12V
GND
TV/VCR
P111
IDL.12V
GND
TV/VCR
WP200-1
SE.H
A/C.PB
GND
A/C.REC
P107
Y.V.IN
V.GND
V.GND
I.V.OUT
WP200-2
CTL.+
CTL.-
P201
GND
MIC.OUT
MIC.SW
WP101
GND
MIC.OUT
MIC.SW
P109
IDL.12V
F.V.IN
V.GND
F.V.SW
F.A.SW
F.A.L.IN
A.GND
F.A.R.IN
WP2
MOD.VIDEO
V.GND
WP3
MOD.AUDIO
A.GND
P110
MIC.IN
A.GND
MIC.SW
P.UP 12V
C.SYNC
PICT
GND
AFC-H
PAL
AFC-H
Y.V.OUT
AL.5
GND
ANC.VOL
I.V.OUT
V.SYNC.DET
VP
SP/LP
V.SWP
PAL
APL.DET
APL.REF
GND
EE
TRICK
C.ROT
LNC
REC.S
FLY.E.S
AL.12V
AL 9V
PB
B/W
C.DET
AL.5V
GND
GND
GND
GND
VIDEO PCB
V1154A500B
WP800
PAL
S.DET-P
EDIT
WP601
Y.V.IN
GND
GND
I.V.OUT
P603
GND
AFC-H
P600
R.P.LC
GND
REC.S.9V
PB.5V
R.P.Y
V.GND
COMP.ON
V.SWP
PAL
AFC-SYNC
P300
SP
FLY.E.S
ENV.DET
HA.SW
A.SWP
ENV.SW
A.GND
FM.REC
A.PB.FM
IDL.5V
A.REC.FM
FE.GND
TUNE
A.REC.S9V
AL.5V
WP1
WP3
GND
AFC-H
WP2
GND
VPST.OUT
GND
VPST.IN
WP101
BLANK
GND
RED
R-GND
GREEN
G-GND
BLUE
B-GND
EOG ONLY
VPST/PDC PCB
V1154B5160
P1
RESET
VPST.RDY
VPST.SO
VPST.SI
VPST.CLK
WP1
GND
IDL.5V
AL.12V
TUNER.POW
WP2
R.P.LC
GND
REC.S.9V
PB.5V
R.P.Y
V.GND
COMP.ON
V.SWP
PAL
AFC-SYNC
PRE AMP PCB
V1154B5020
P1
A-CH-1
A-COM
A-CH-2
GND
LP-CH-1
LP-COM
LP-CH-2
SP-CH-2
SP-COM
SP-CH-1
FLY.E GND
FLY.E HEAD
A CH-1
A CH-2
LP CH-1
LP CH-2
SP CH-2
SP CH-1
FLY.E HEAD
WP201
F.E.H
GND
FULL ERASE HEAD
SE.H
A/C.PB
GND
A/C.REC
CTL.-
CTL.+
SIDE E HEAD
AUDIO R/P HEAD
CTL HEAD
A/C HEAD PCB
V1102B5120
B (POWER SUPPLY) LINE


F
G
H
I
J
K
1
2
3
4
5
6
7
8
9
Y (2) PCB
503B
Y (1) PCB
503A
DN-MULTI PCB
V1154B508B
(EOH-DN ONLY)
J151
NC
NC
NICAM PCB
V1154B508A
(EOH-N, EOH-DN, EK-VN ONLY)
P1
SIF IN
GND
J1
D.GND
D.AL.5V
C4
NICAM/FM
TV.MODE
AL.5V
FM.MONO
AL.12V
TU.L
A.GND
A.GND
TU.R
J50
GND
GND
P1
SIF.IN
GND
D-MULTI PCB
V1154C5090
(EOH-D, EOG ONLY)
NC
NC
TV MODE
AL 5V
NC
AL 12V
TU.L
A.GND
A.GND
TU.R
J1
CONT.5V
MOTOR.GND
MOTOR.14V
+37V
-37V
AC.3.7V
AC.3.7V
P1
P50
P51
EOH-DN, EOH-N, EK-VN ONLY
EOH-DN ONLY
EOH-D, EOG ONLY
P106
IDL.12V
F.V.IN
V.GND
F.V.SW
F.A.SW
F.A.L.IN
A.GND
F.A.R.IN
P101
MIC.IN
A.GND
MIC.SW
P.UP.12V
P104
Y.V.IN
GND
GND
I.V.OUT
P102
IDL.12V
GND
TV/VCR
P108
TU.V
GND
IDL.5V
P105
A.IN.L
GND
A.IN.R
GND
A.OUT.L
GND
A.OUT.R
INT/EXT
P107
INT/EXT
AVT/AV2
P103
GND
VPST.OUT
GND
VPST.IN
WP101
GND
MIC.OUT
MIC.SW
P109
MOD.VIDEO
V.GND
P110
MOD.AUDIO
A.GND
IN-OUT (B) PCB
V1154B514B
EK, EOH ONLY
IN-OUT (A) PCB
V1154B514A
EK, EOH ONLY
WF2
R.OUT
GND
L.OUT
GND
SAT.R.IN
IDL.12V
SAT.L.IN
GND
EXT.L.IN
GND
EXT.R.IN
WF1
TV.V.OUT
TV.CTL.12
EXT.V.IN
GND
SAT.V.IN
P105
NOR/DEC
INT/EXT
AVT/AV2
WF300
A.IN.L
GND
A.IN.R
GND
A.OUT.L
GND
A.OUT.R
INT/EXT
P106
EOG ONLY
TU.L
A.GND
TU.R
A.GND
TU.V
A.GND
IDL.5V
WF1
EXCEPT EOG
P104
WP1
IDL.12V
GND
TV/VCR
P111
WP200-1
SE.H
A/C.PB
GND
A/C.REC
WP200-2
CTL.+
CTL.-
P107
Y.V.IN
V.GND
V.GND
I.V.OUT
P201
GND
MIC.OUT
MIC.SW
WP101
WP2
MOD.VIDEO
V.GND
WP3
MOD.AUDIO
A.GND
P109
P110
MIC.IN
A.GND
MIC.SW
P.UP 12V
P108
P112
P113
CANAL PLUS (A) PCB
V1154B512A
(EOG ONLY)
CANAL PLUS (B) PCB
V1154B512B
(EOG ONLY)
P101
WF102
D.CTL.12
V.GND
D.V.IN
V.GND
D.V.OUT
TV.CTL.12
E.1.V.IN
V.GND
E.1.V.OUT
V.GND
E.2.V.IN
P102
WF103
E1.R.IN
E1.L.IN
A.GND
D.L.OUT
D.R.OUT
A.GND
D.R.IN
D.L.IN
P103
WF104
R.OUT
E2.R.IN
A.GND
L.OUT
E2.L.IN
A.GND
E1.L.OUT
E1.R.OUT
P2
BLANK
GND
RED
R-GND
GREEN
G-GND
BLUE
V-GND
FLY.E.S
AL.12V
AL 9V
PB
B/W
C.DET
AL.5V
GND
GND
GND
GND
PAL
AFC-SYNC
P300
SP
FLY.E.S
ENV.DET
HA.SW
A.SWP
ENV.SW
A.GND
FM.REC
A.PB.FM
IDL.5V
A.REC.FM
FE.GND
TUNE
A.REC.S9V
AL.5V
WP1
PCB
P1
A-CH-1
A-COM
A-CH-2
GND
LP-CH-1
LP-COM
LP-CH-2
SP-CH-2
SP-COM
SP-CH-1
FLY.E GND
FLY.E HEAD
F.E.H
GND
WP201
A CH-1
A CH-2
LP CH-1
LP CH-2
SP CH-2
SP CH-1
FLY.E HEAD
FULL ERASE HEAD
SE.H
A/C.PB
GND
A/C.REC
CTL.-
CTL.+
A/C HEAD PCB
V1102B5120
SIDE E HEAD
AUDIO R/P HEAD
CTL HEAD

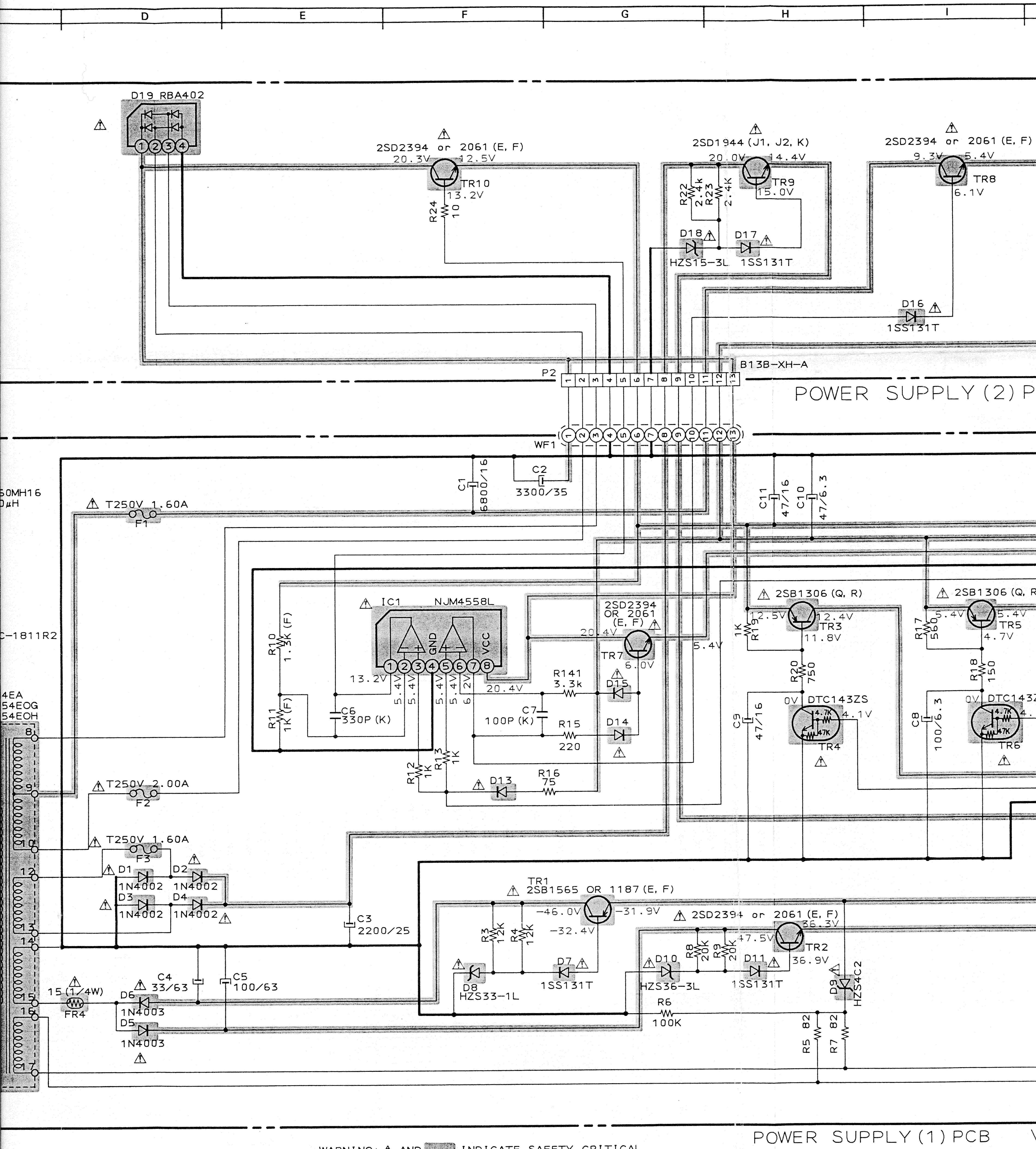
VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
CONNECTION DIAGRAMD
No.16-1 V115401M
A1


A
B
C
D
E
1
2
3
4
5
6
7
8
D19 RBA402
①②③④
2SD239
20.3
AC CORD
EK...VCTFK
EOH...SE-1
EOG...SE-1
EOG (V) :
AC230V, 50Hz
EOG (Y1) :
AC220-230V, 50Hz
AC CORD
EOH:
AC220-230V, 50Hz
AC CORD
EK:AC240V, 50Hz
2
1
P3
EXCEPT
EOG
P4
EOG ONLY
*L2:
FKOB160MH16
1000.0μH
*L2
*L1:
PLH11C-1811R2
*L1
T1
EK:V1154EA
EOG:V1154EOG
EOH:V1154EOH
6
5
2
8
9
10
12
13
14
15
16
17
T250V 1.60A
F1
T250V 2.00A
F2
T250V 1.60A
F3
D1
1N4002
D2
1N4002
D3
1N4002
D4
1N4002
C3
2200/25
C4
33/63
C5
100/63
15 (1/4W)
FR4
D6
1N4003
D5
1N4003
IC1
①②③
13.2V
5.4V
5.4V
R10
1.3K (F)
R11
1K (F)
C6
330P (K)
R12

INDICATED VOLTAGES WERE
MEASURED DURING PB MODE.

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W (J)
ALL CAPACITORS IN μF 50WV (M)
ALL DIODES ARE 1SS131T

WARNING: ⚠ AND
COMPON
REPLAC
ONLY W
PARTS
AVERTISSMENT:
COMPOS
POUR M
DE L'A
PIÈCES


D
E
F
G
H
I
D19 RBA402
2SD2394 or 2061 (E, F)
20.3V
12.5V
TR10
13.2V
R24 10
2SD1944 (J1, J2, K)
20.0V
14.4V
R22 2.4k
R23 2.4K
TR9
15.0V
D18
HZS15-3L
D17
1SS131T
2SD2394 or 2061 (E, F)
9.3V
5.4V
TR8
6.1V
D16
1SS131T
B13B-XH-A
P2
POWER SUPPLY (2) P
WF1
C1 6800/16
C2 3300/35
C11 47/16
C10 47/6.3
50MH16
μH
T250V 1.60A
F1
C-1811R2
IC1 NJM4558L
GND
VCC
13.2V
5.4V
5.4V
5.4V
5.4V
2V
R10 1.3K (F)
R11 1K (F)
C6 330P (K)
2SD2394 OR 2061 (E, F)
20.4V
TR7
6.0V
5.4V
20.4V
R141 3.3k
D15
C7 100P (K)
R15 220
D14
R12 1K
R13 1K
D13
R16 75
2SB1306 (Q, R)
12.5V
12.4V
TR3
11.8V
R19 1K
R20 750
0V
DTC143ZS
4.7K
47K
4.1V
TR4
C9 47/16
2SB1306 (Q, R
5.4V
5.4V
TR5
4.7V
R17 560
R18 150
0V
DTC143
TR6
C8 100/6.3
4EA
54EOG
54EOH
8
9
10
12
13
14
15
16
17
T250V 2.00A
F2
T250V 1.60A
F3
D1
D2
1N4002
1N4002
D3
D4
1N4002
1N4002
C3 2200/25
TR1
2SB1565 OR 1187 (E, F)
-46.0V
-31.9V
-32.4V
R3 12K
R4 12K
D7
1SS131T
D8
HZS33-1L
2SD2394 or 2061 (E, F)
36.3V
47.5V
TR2
36.9V
R8 20K
R9 20K
D10
HZS36-3L
D11
1SS131T
D9 HZS4C2
R6 100K
R5 82
R7 82
C4 33/63
C5 100/63
15 (1/4W)
FR4
D6
1N4003
D5
1N4003
POWER SUPPLY (1) PCB

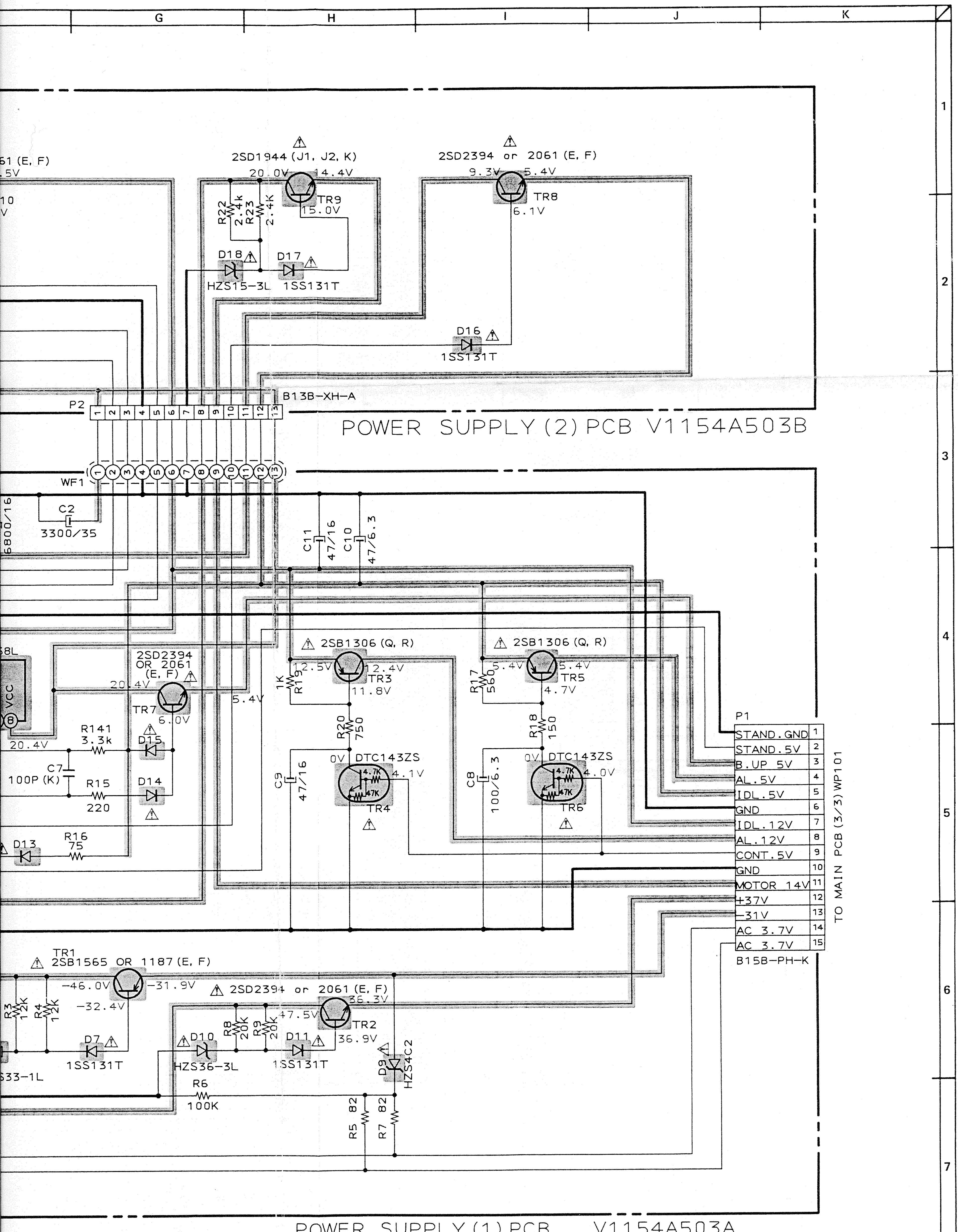
INDICATED VOLTAGES WERE MEASURED DURING PB MODE.

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W (J)
ALL CAPACITORS IN μF 50WV (M)
ALL DIODES ARE 1SS131T

WARNING: ⚠ AND ▨ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ▨, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ, POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

▬ B (POWER SUPPLY) LINE


G
H
I
J
K
1
2
3
4
5
6
7
8
2SD1944 (J1, J2, K)
20.0V
14.4V
TR9
15.0V
R22 2.4k
R23 2.4K
D18
HZS15-3L
D17
1SS131T
2SD2394 or 2061 (E, F)
9.3V
5.4V
TR8
6.1V
D16
1SS131T
61 (E, F)
.5V
10
V
P2
B13B-XH-A
POWER SUPPLY (2) PCB V1154A503B
WF1
C2
3300/35
6800/16
C11
47/16
C10
47/6.3
2SB1306 (Q, R)
12.5V
12.4V
TR3
11.8V
R19 1K
R20 750
2SB1306 (Q, R)
5.4V
5.4V
TR5
4.7V
R17 560
R18 150
2SD2394
OR 2061
(E, F)
20.4V
TR7
6.0V
5.4V
VCC
8
20.4V
R141
3.3k
D15
C7
100P (K)
R15
220
D14
D13
R16
75
0V
DTC143ZS
4.1V
4.7K
47K
TR4
C9
47/16
0V
DTC143ZS
4.0V
4.7K
47K
TR6
C8
100/6.3
P1
STAND.GND 1
STAND.5V 2
B.UP 5V 3
AL.5V 4
IDL.5V 5
GND 6
IDL.12V 7
AL.12V 8
CONT.5V 9
GND 10
MOTOR 14V 11
+37V 12
-31V 13
AC 3.7V 14
AC 3.7V 15
B15B-PH-K
TO MAIN PCB (3/3) WP101
TR1
2SB1565 OR 1187 (E, F)
-46.0V
-31.9V
-32.4V
R3 12K
R4 12K
D7
1SS131T
S33-1L
2SD2394 or 2061 (E, F)
36.3V
47.5V
TR2
36.9V
R8 20K
R9 20K
D10
HZS36-3L
D11
1SS131T
D9
HZS4C2
R6
100K
R5 82
R7 82
POWER SUPPLY (1) PCB V1154A503A

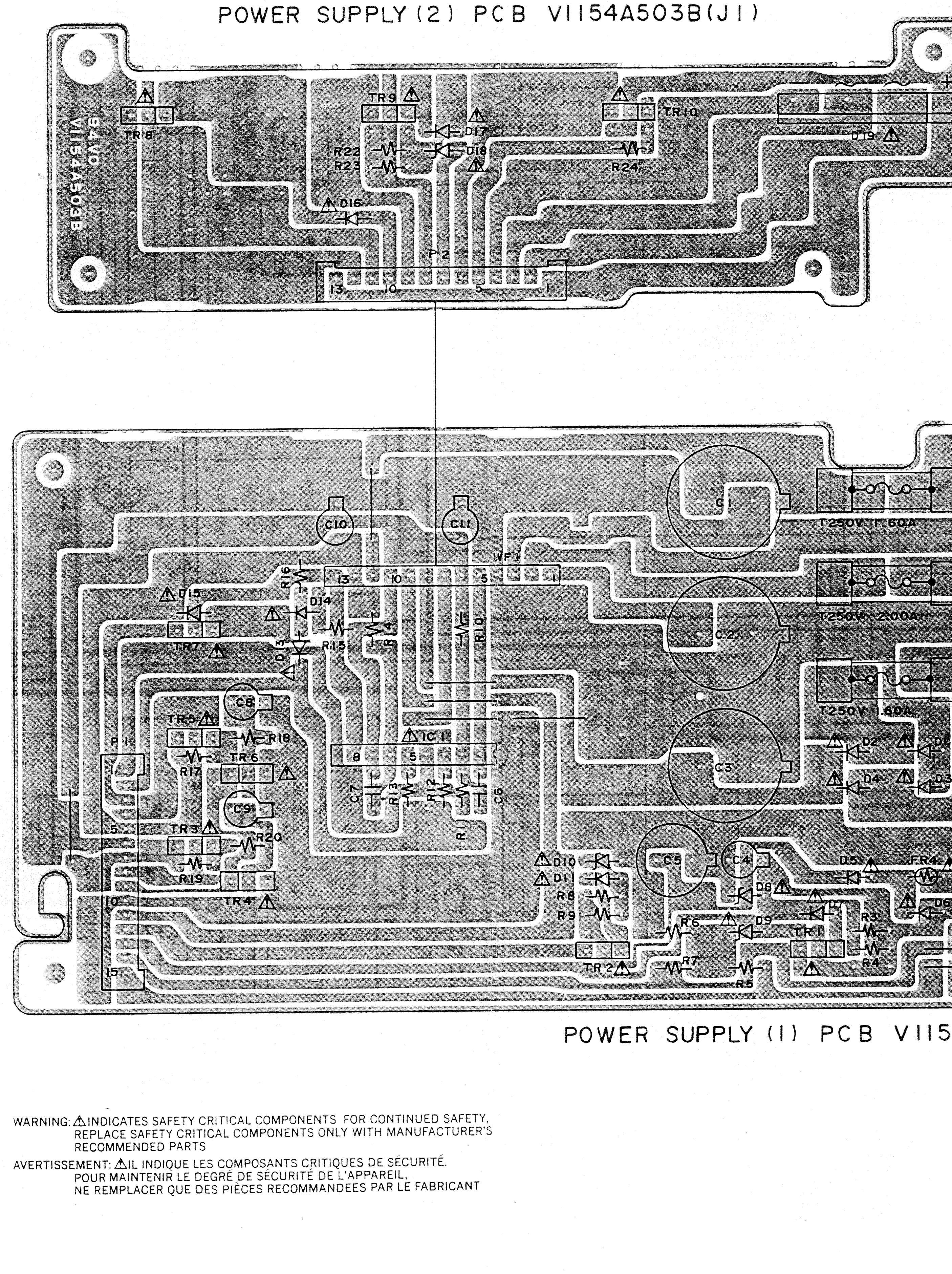
DICATE SAFETY CRITICAL
OR CONTINUED SAFETY.
Y CRITICAL COMPONENTS
NUFACTURER'S RECOMMENDED

▨ B (POWER SUPPLY) LINE

, ILS INDIQUENT LES
RITIQUES DE SÉCURITÉ.
R LE DEGRÉ DE SÉCURITÉ
, NE REMPLACER QUE DES
MANDEES PAR LE FABRICANT

VS-F1000EK-VN/EOG-VD
VS-F1010EOH-N/EOH-D
VS-F1030EOH-DN
POWER SUPPLY (1) & (2)
SCHEMATIC DIAGRAM
No.16-2 V115402M
A2

POWER SUPPLY (2) PCB V1154A503B(J1)

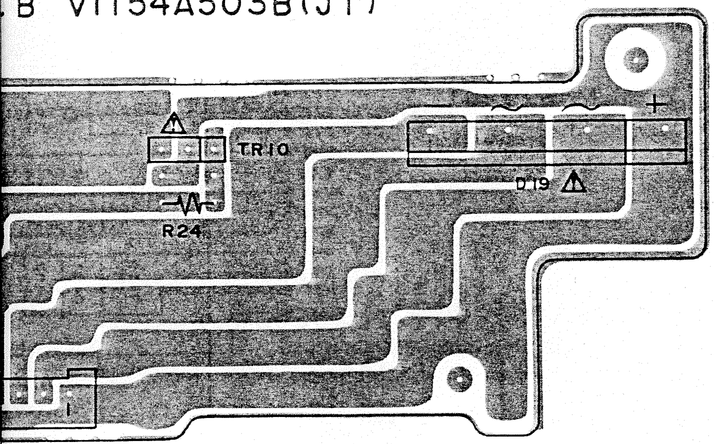

94V0
V1154A503B
TR8
TR9
TR10
D17
D18
D19
R22
R23
R24
D16
P2
13
10
5
1
C10
C11
WF1
R16
D15
D14
D13
TR7
R15
R14
R10
C1
T250V 1.60A
C2
T250V 2.00A
T250V 1.60A
C3
C8
TR5
R18
R17
TR6
IC1
8
C7
R13
R12
R11
C6
P1
C9
TR3
R20
R19
TR4
15
D10
D11
R8
R9
C5
C4
D8
D9
R6
R7
TR2
R5
D2
D3
D4
D5
D6
D7
FR4
TR1
R3
R4

POWER SUPPLY (1) PCB V115

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY,
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
RECOMMENDED PARTS

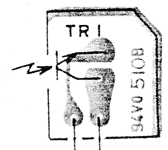
AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRE DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT

B V1154A503B(J1)

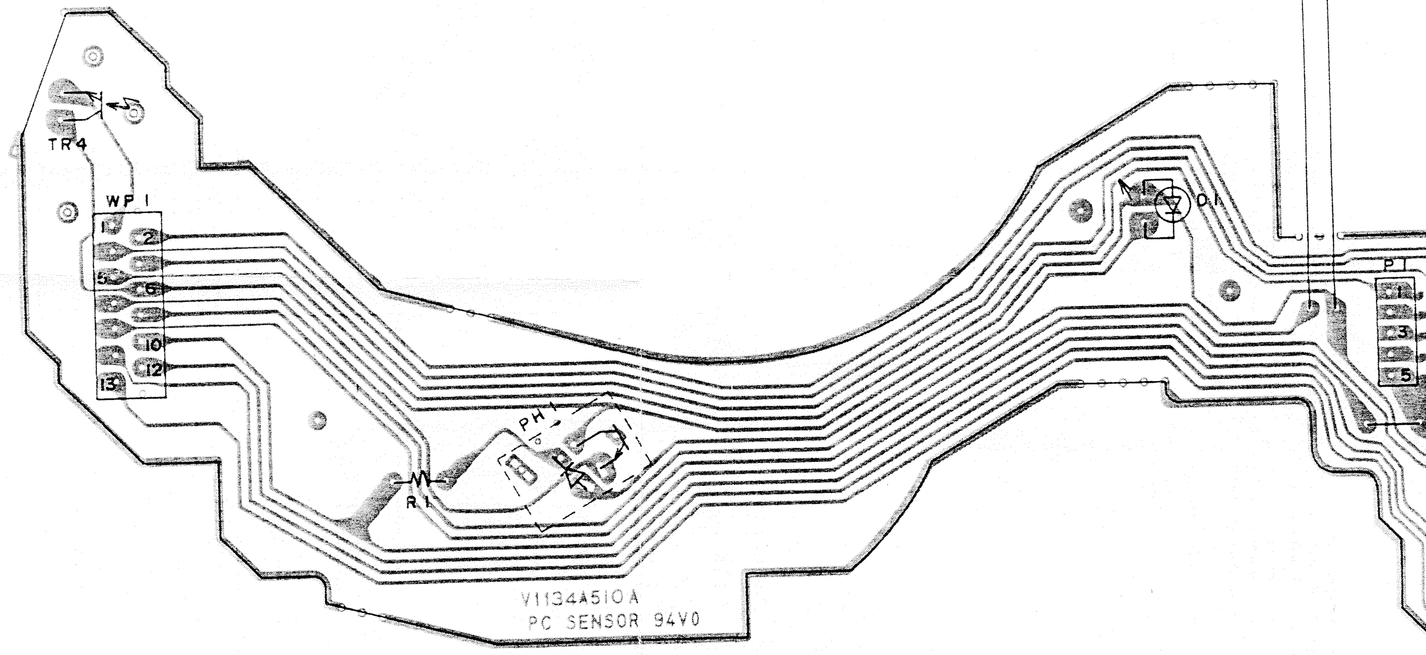


TR10
R24
D19
+

SENSOR(S) P
V1134A501



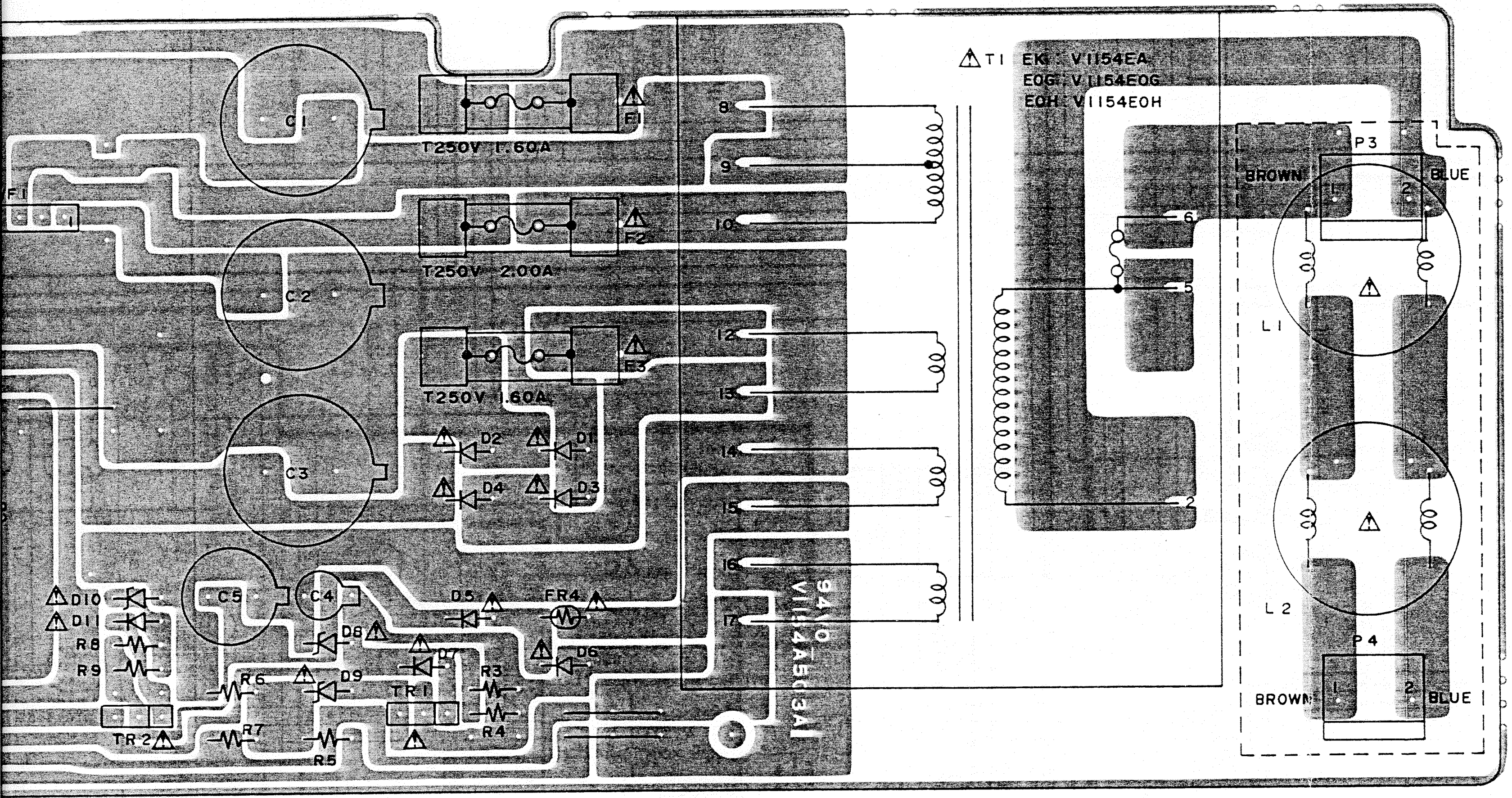
TR1
94V0 5108



TR4
WP1
1
2
5
6
10
12
13
PH1
R1
D1
P1
1
3
5
V1134A510A
PC SENSOR 94V0

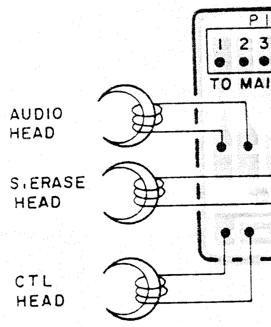
SENSOR PCB V1134A501A

TO LOADING MOTOR
TO LOADING MOTOR
TO REC SAFETY SW



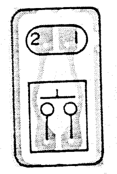
T1 EK: V1154EA
E0G: V1154E0G
E0H: V1154E0H
C1
C2
C3
C4
C5
F1
F1
F2
F3
T250V 1.60A
T250V 2.00A
T250V 1.60A
D1
D2
D3
D4
D5
D6
D8
D9
D10
D11
FR4
R3
R4
R5
R6
R7
R8
R9
TR1
TR2
8
9
10
12
13
14
15
16
17
6
5
2
P3
P4
BROWN
BLUE
L1
L2
94V0
V1154A503A

POWER SUPPLY (1) PCB V1154A503A(J1)



P1
1 2 3
TO MAI
AUDIO HEAD
S.ERASE HEAD
CTL HEAD

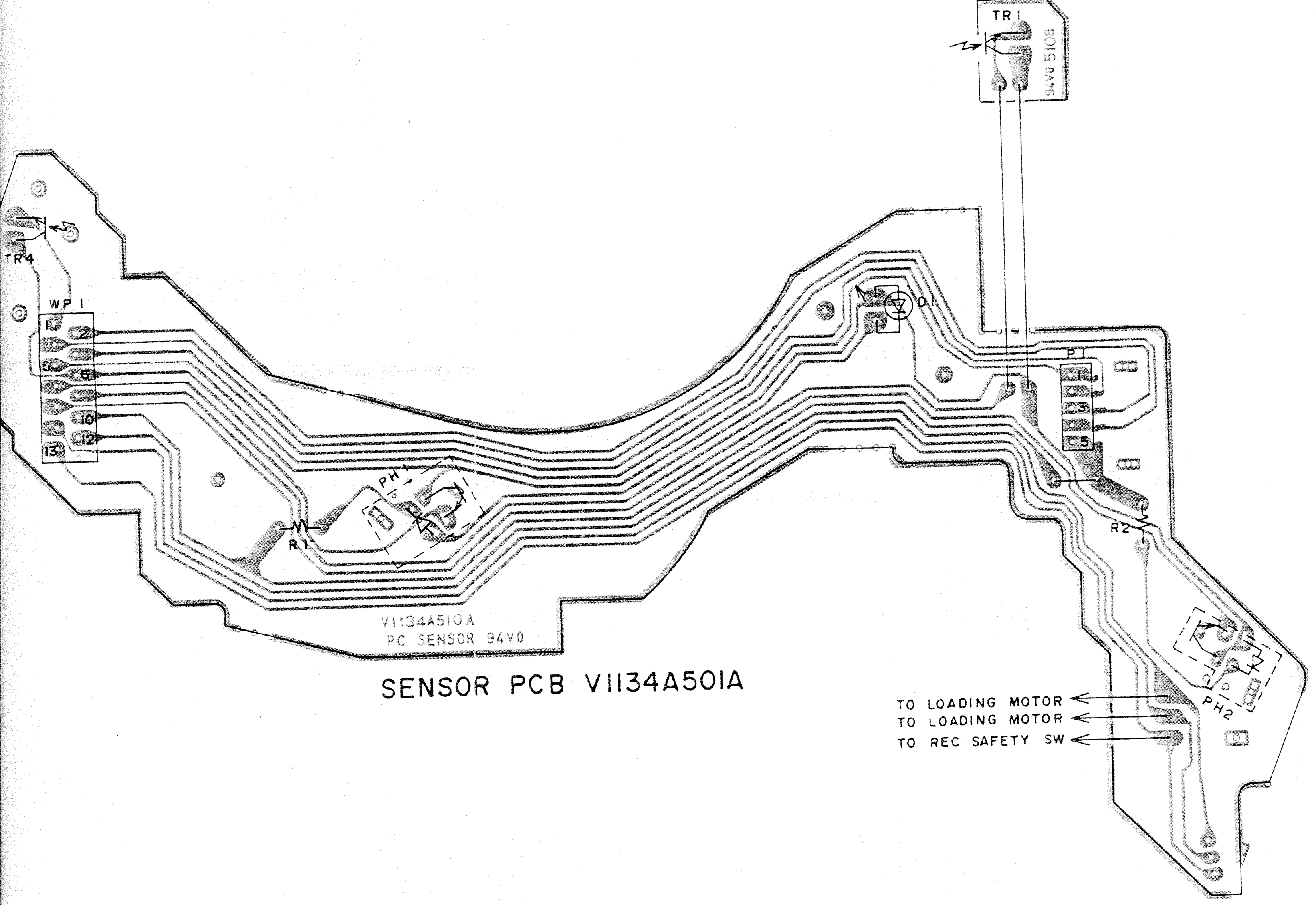
A/C HE
V1102B5



S-SWITCH
V1154C518

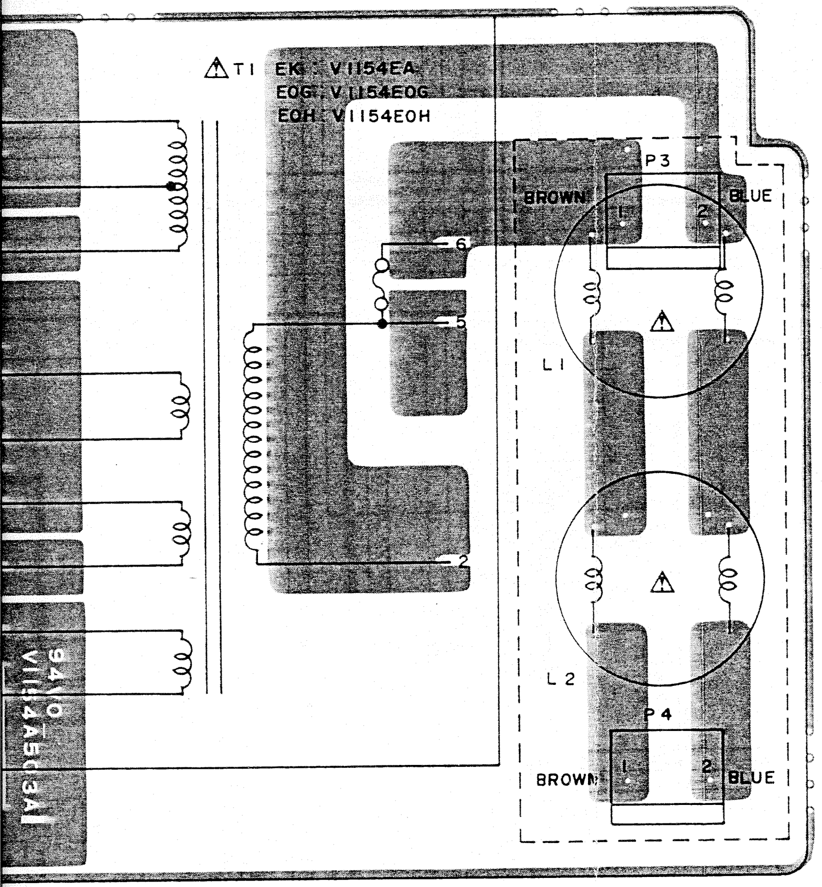
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING
PARTS INFORMATION.

SENSOR (S) PCB
V1134A501B

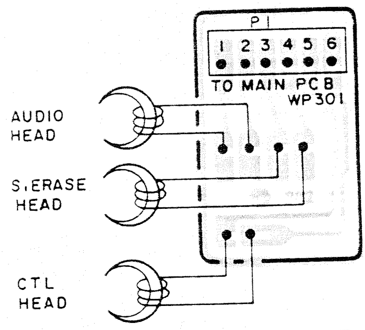

TR1
94V0 5108
TR4
WP1
2
5
6
10
12
13
PH1
R1
D1
P1
3
5
R2
PH2
V1134A510A
PC SENSOR 94V0

SENSOR PCB V1134A501A

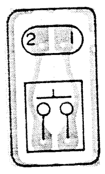
TO LOADING MOTOR
TO LOADING MOTOR
TO REC SAFETY SW


⚠T1 EK : V1154EA
EOG : V1154EOG
EOH : V1154EOH
P3
BROWN
BLUE
1
2
6
5
2
L1
⚠
⚠
L2
P4
BROWN
BLUE
1
2
94V0
V1154A513A1

)

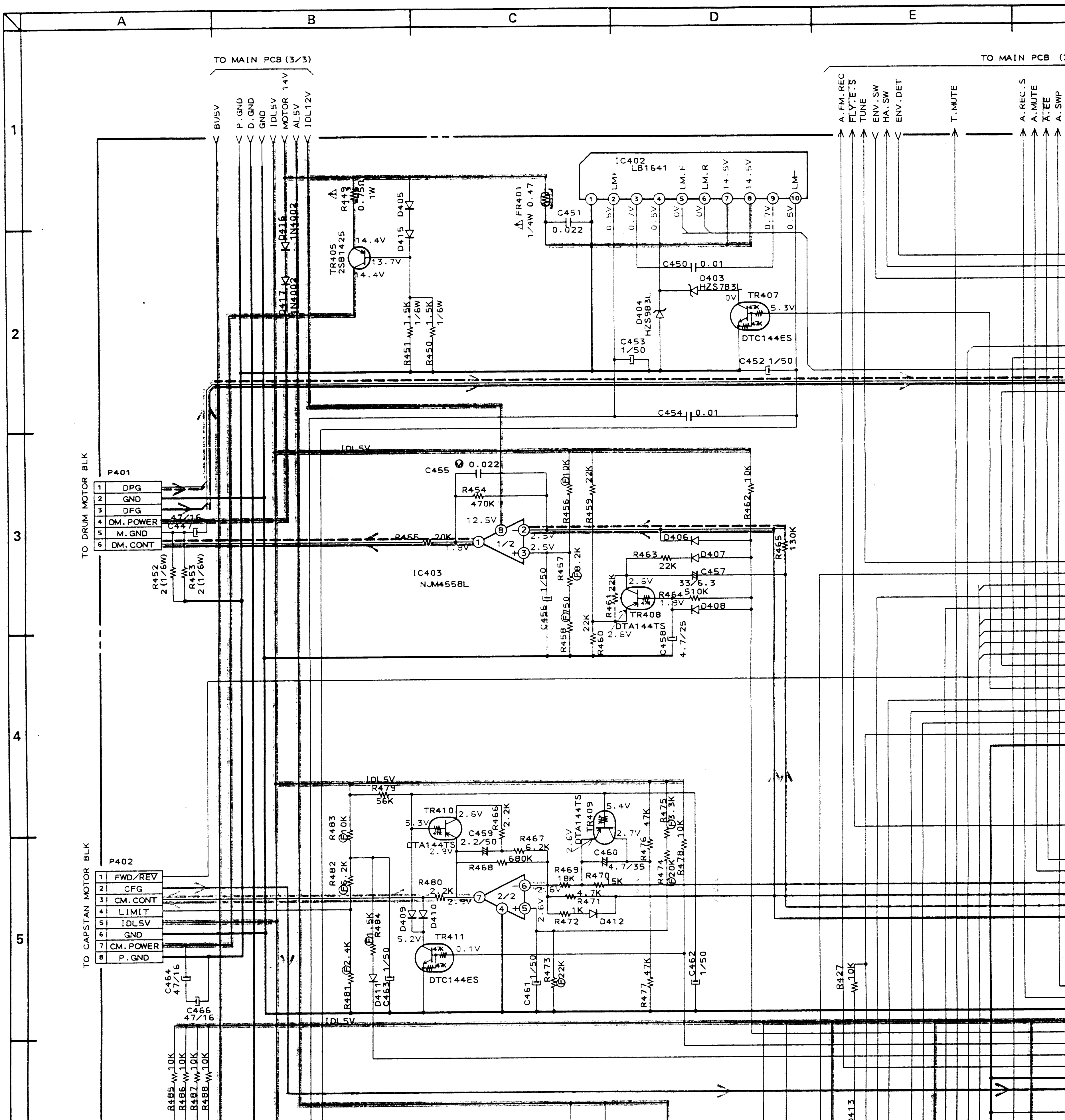

P1
1 2 3 4 5 6
TO MAIN PCB
WP301
AUDIO HEAD
S.ERASE HEAD
CTL HEAD

A/C HEAD PCB
V1102B5120J1



S-SWITCH PCB
V1154C5180

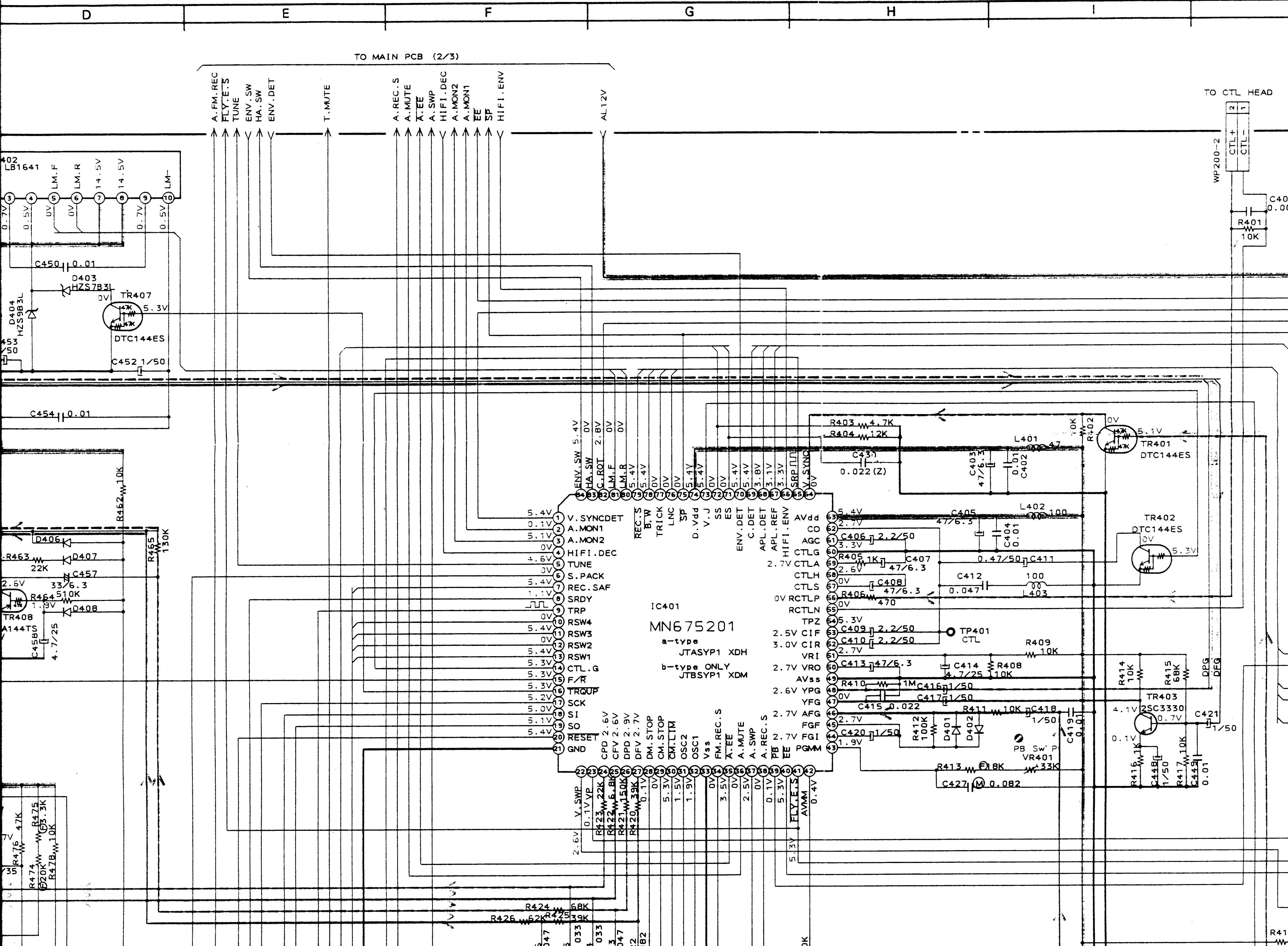
TE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING
PARTS INFORMATION.


TO MAIN PCB (3/3)
BUSV
P.GND
D.GND
GND
IDL5V
MOTOR 14V
AL5V
IDL12V
IC402 LB1641
LM+
LM.F
LM.R
14.5V
LM−
FR401 1/4W 0.47
C451 0.022
C450 0.01
D403 HZS7B3L
D404 HZS9B3L
TR407 DTC144ES
C453 1/50
C452 1/50
C454 0.01
TR405 2SB1425
R449 0.75Ω 1W
D405
D415
D416 1N4002
D417 1N4002
R451 1.5K 1/6W
R450 1.5K 1/6W
TO DRUM MOTOR BLK
P401
DPG
GND
DFG
DM.POWER
M.GND
DM.CONT
C447 47/16
R452 2(1/6W)
R453 2(1/6W)
IDL5V
C455 0.022
R454 470K
R455 20K
IC403 NJM4558L
R456 10K
R459 22K
R462 10K
R457 8.2K
R458 750
C456 1/50
R460 22K
R461 22K
TR408 DTA144TS
R463 22K
R464 510K
C457 33/6.3
C458 4.7/25
D406
D407
D408
R465 130K
TO CAPSTAN MOTOR BLK
P402
FWD/REV
CFG
CM.CONT
LIMIT
IDL5V
GND
CM.POWER
P.GND
C464 47/16
C466 47/16
R479 56K
R483 10K
R482 6.2K
TR410 DTA144TS
C459 2.2/50
R466 2.2K
R467 6.2K
R468 680K
TR409 DTA144TS
C460 4.7/35
R469 18K
R470 15K
R471 4.7K
R472 1K
D412
R475 47K
R476 3.3K
R474 20K
R478 10K
R480 2.2K
D409
D410
R484 1.5K
TR411 DTC144ES
R481 2.4K
D411
C463 1/50
C461 1/50
R473 22K
R477 47K
C462 1/50
R427 10K
R485 10K
R486 10K
R487 10K
R488 10K
TO SENSOR PCB WP1
P403
S.SENS
RSW1
RSW2
RSW3
RSW4
IDL5V
T.REEL P
E.SENS
S.REEL P
GND
LM+
LM−
REC.SAF
R491 36K
R492 36K
R497 82K
R498 82K
IC404 BA10393N
TRP
SRP
R428 10K
R429 10K
D413
R493 43K
R494 20K
R495 43K
R496 20K
R489 10K
R490 10K
C465 0.01
D.GND
TO S-SWITCH PCB
P404
S.PACK
GND
C467 0.01
IC405 S-8053ALR-Z
C468 0.01
R438 10K
R439 10
D414
C469 100/6.3
IC406 ST24C02
SDA
SCL
TEST
Vss
Vcc
R430 10K
R431 10K
R432 10K
L501 47
C501 47/6.3
R434 10K
R433
R435
R436 10K
R437
P406
BUSV
RESET
SRDY
SCLK
IMSCLK
SI
SO
IDL5V
D.GND
T.MUTE
C.SYNC
IMS.STB
ANC.VOL
PICT
RESET.IN
SDA
SCL
TO OPERATION(1) PCB WP3
TO MAIN PCB
A.FM.REC
FLY.E.S
TUNE
ENV.SW
HA.SW
ENV.DET
T.MUTE
A.REC.S
A.MUTE
A.EE
A.SWP
A
B
C
D
E
1
2
3
4
5
6
7
8

MAIN PCB V1154A500A

WARNING: ⚠ AND ▨ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ▨, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT


D
E
F
G
H
I
TO MAIN PCB (2/3)
A.FM.REC
FLY.E.S
TUNE
ENV.SW
HA.SW
ENV.DET
T.MUTE
A.REC.S
A.MUTE
A.EE
A.SWP
HIFI.DEC
A.MON2
A.MON1
EE
SP
HIFI.ENV
AL12V
TO CTL HEAD
WP200-2
CTL+
CTL-
R401 10K
LB1641
C450 0.01
D403 HZS7B3L
D404 HZS9B3L
TR407
DTC144ES
C452 1/50
C454 0.01
R462 10K
D406
D407
R463 22K
C457 33/6.3
R464 510K
D408
TR408
A144TS
C458 4.7/25
R465 130K
R403 4.7K
R404 12K
C431 0.022(Z)
C403 47/6.3
C402 0.01
L401 47
R402 10K
TR401
DTC144ES
L402 100
C405 47/6.3
C404 0.01
TR402
DTC144ES
C406 2.2/50
R405 1K
C407 47/6.3
C411 0.47/50
C412 0.047
L403 100
C408
R406 470
TP401 CTL
C409 2.2/50
C410 2.2/50
R409 10K
C413 47/6.3
C414 4.7/25
R408 10K
R410 1M
C416 1/50
C417 1/50
C415 0.022
R411 10K
C418 1/50
C419 0.01
C420 1/50
R412 100K
D401
D402
PB Sw' P
VR401 33K
R413 18K
C427 0.082
R414 10K
R415 68K
DPG
DFG
TR403
2SC3330
C421 1/50
R416 1K
C448 1/50
R417 10K
C449 0.01
IC401
MN675201
a-type
JTASYP1 XDH
b-type ONLY
JTBSYP1 XDM
V.SYNCDET
A.MON1
A.MON2
HIFI.DEC
TUNE
S.PACK
REC.SAF
SRDY
TRP
RSW4
RSW3
RSW2
RSW1
CTL.G
F/R
TRQUP
SCK
SI
SO
RESET
GND
ENV.SW
HA.SW
C.ROT
LM.F
LM.R
REC.S
B.W
TRICK
LNC
SP
D.Vdd
V.J
SS
ES
ENV.DET
C.DET
APL.DET
APL.REF
HIFI.ENV
SRP
V.SYNC
AVdd
CO
AGC
CTLG
CTLA
CTLH
CTLS
RCTLP
RCTLN
TPZ
CIF
CIR
VRI
VRO
AVss
YPG
YFG
AFG
FGF
FGI
PGMM
V.SWP
VP
CPD
CFV
DPD
DFV
DM.STOP
CM.STOP
CM.LIM
OSC2
OSC1
Vss
FM.REC.S
A.EE
A.MUTE
A.SWP
A.REC.S
PB
EE
FLY.E.S
AVMM
R424 68K
R426 62K
R425 39K
C426 0.0047
C425 0.033
C424 0.033
C423 0.0047
C422 0.0082
R419 10K
R427 10K
GND
IDL5V
D.GND
C515 0.01
C516 47/16
L506 100
R475 3.3K
R476 4.7K
R474 820K
R478 10K
R477 47K
C462 1/50
R428 10K
R429 10K
D413
C428 33P CH
X401 8MHz
C429 22P CH
L503 100
C509 0.01
C510 47/6.3
TR503 2SC3330
R511 4.7K
C513 10/16
R517 470
TR505 2SA1317
TR504 DTC144ES
R513 51K
R514
R512 1K
D501
EXCEPT EK
C511 39P
R515 510
TR506 2SC3330
C512 0.01
L504 33
TR507 DTC144ES
R518 6.8K
TR509 2SA1317
R519 24K
C514 22P
R520 4.7K
IC502 MM1068XS
X502 CSB500F10
C517 220P
R521 220
R522 2.2K
C518
C519 0.0047
C520 0.022
C521 47/6.3
C522 4.7/25
R523
C524
R525
C523
R497 82K
R498 82K
IC404 BA10393N
TRP
SRP
C465 0.01
L501 47
C501 47/6.3
C502 0.01
IC501
μPD6450CX-515
R501 22K
R502 22K
R503 22K
BUSY
CLK
STB
S.DATA
VDD
NC
LOSC OUT
LOSC IN
VSS
V.IN
V.OUT
VUL
VBL
VCL
H.Sync
V.Sync
XOUT
XIN
R504 750
R505 2.4K
R506 6.8K
R507 2.2K
C507 0.01
C508 0.01
J550
J5502
EK ONLY
TR501 DTA114ES
TR502 DTA114ES
R508 4.7K
R509
R510 6.8K
L502 33μ
VC501 30P
IMS
C503 18P CH
C504 18P CH
C505 18P CH
X501 17.73MHz
C506 150P
TR508 2SA1317
R516 4.7K
R430 10K
R431 10K
R432 10K
R434 10K
*R433
*R435
*R436
R437 10K
IC406
ST24C02
Vss
SDA
SCL
TEST
Vcc
* R435~436:10K
* R433:100K
P406
BUSV
RESET
SRDY
SCLK
IMSCLK
SI
SO
IDL5V
D.GND
T.MUTE
C.SYNC
IMS.STB
ANC.VOL
PICT
RESET.IN
SDA
SCL
TO OPERATION(1) PCB WP3

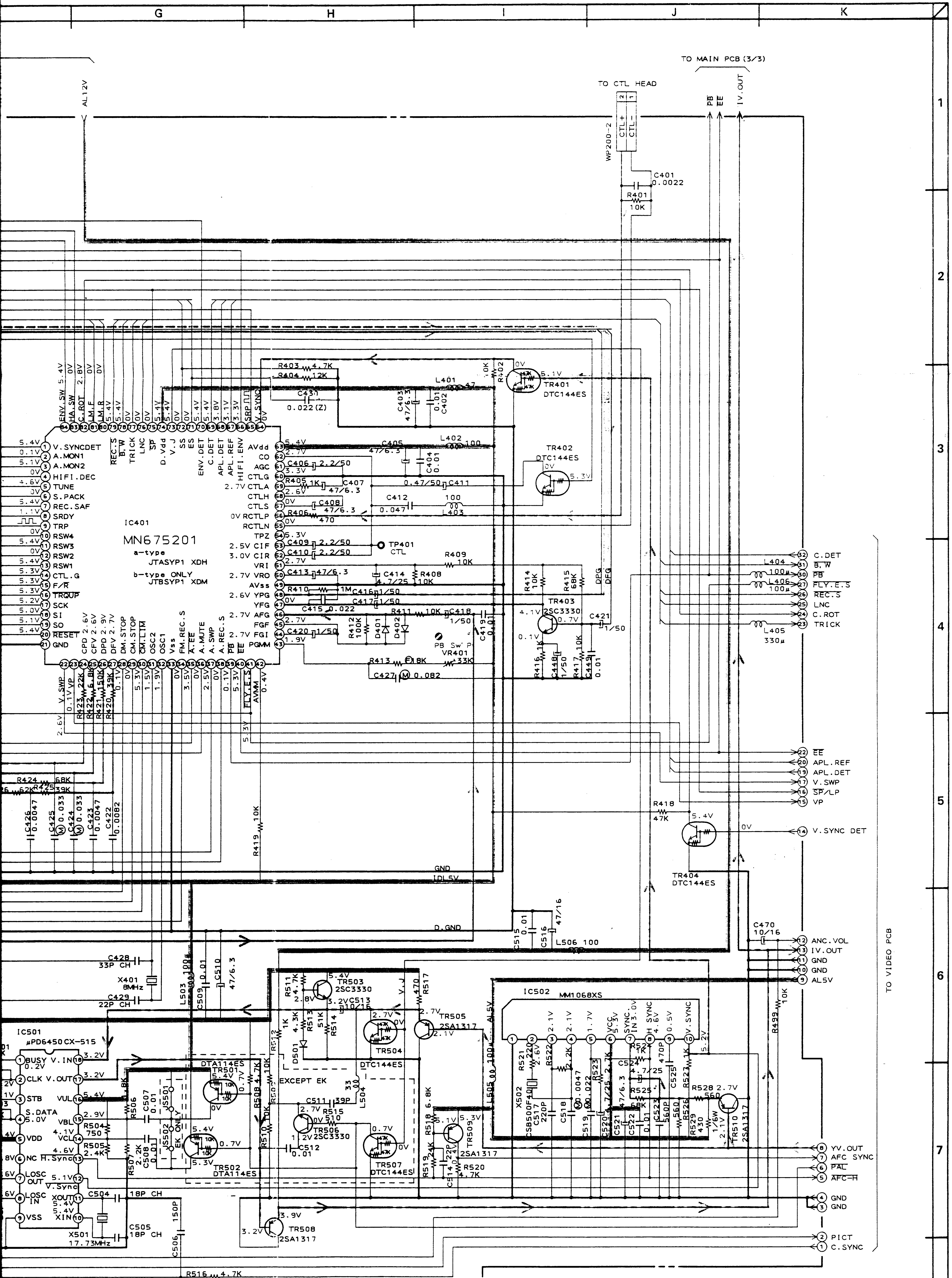
T: ⚠ ET ▨, ILS INDIQUENT LES
POSTANTS CRITIQUES DE SÉCURITÉ,
R MAINTENIR LE DEGRÉ DE SÉCURITÉ
L'APPAREIL, NE REMPLACER QUE DES
CES RECOMMANDEES PAR LE FABRICANT

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF
ALL INDUCTORS IN μH(K)
ALL DIODES ARE 1SS131T

▬▬▬ B (POWER SUPPLY) LINE
— — — CAPSTAN SPEED CONTROL LINE
— - — CAPSTAN PHASE CONTROL LINE
— — — DRUM SPEED CONTROL LINE
— - - — DRUM PHASE CONTROL LINE
— — — VIDEO SIGNAL LINE

INDICATED VOLTAGES WERE
MEASURED DURING PB MODE.
(TAPE SPEED:SP)

VS
VS
VS
MA
(SE
SC


G
H
I
J
K
1
2
3
4
5
6
7
8
AL12V
TO MAIN PCB (3/3)
TO CTL HEAD
WP200-2
CTL+
CTL-
PB
EE
IV.OUT
C401 0.0022
R401 10K
IC401
MN675201
a-type JTASYP1 XDH
b-type ONLY JTBSYP1 XDM
V.SYNCDET
A.MON1
A.MON2
HIFI.DEC
TUNE
REC.SAF
S.PACK
SRDY
TRP
RSW4
RSW3
RSW2
RSW1
CTL.G
F/R
TRQUP
SCK
SI
SO
RESET
GND
AVdd
CO
AGC
CTLG
CTLA
CTLH
CTLS
RCTLP
RCTLN
TPZ
CIF
CIR
VRI
VRO
AVss
YPG
YFG
AFG
FGF
FGI
PGMM
ENV.SW
HA.SW
C.ROT
LM.F
LM.R
ENV.DET
C.DET
APL.DET
APL.REF
HIFI.ENV
SRP
V.SYNC
CPD
CFV
DPD
DFV
DM.STOP
CM.STOP
CM.LIM
OSC2
OSC1
Vss
FM.REC.S
A.EE
A.MUTE
A.SWP
A.REC.S
PB
EE
FLY.E.S
AVMM
R403 4.7K
R404 12K
C431 0.022(Z)
L401 47
TR401 DTC144ES
C403 47/6.3
C402 0.01
L402 100
C405 47/6.3
C404 0.01
TR402 DTC144ES
C406 2.2/50
R405 1K
C407 47/6.3
C411 0.47/50
C412 0.047
L403 100
C408 47/6.3
R406 470
C409 2.2/50
TP401 CTL
C410 2.2/50
R409 10K
C413 47/6.3
C414 4.7/25
R408 10K
R410 1M
C416 1/50
C417 1/50
C415 0.022
R411 10K
C418 1/50
R412 100K
D401
D402
C420 1/50
C419 0.01
PB Sw' P
VR401 33K
R413 18K
C427 0.082
R414 10K
R415 68K
DPG
DFG
TR403 2SC3330
C421 1/50
R416 1K
C448 1/50
R417 10K
C449 0.01
L404 100μ
L406 100μ
L405 330μ
C.DET
B.W
PB
FLY.E.S
REC.S
LNC
C.ROT
TRICK
EE
APL.REF
APL.DET
V.SWP
SP/LP
VP
V.SYNC DET
R418 47K
TR404 DTC144ES
R424 68K
R425 39K
C426 0.0047
C425 0.033
C424 0.033
C423 0.0047
C422 0.0082
R423 22K
R422 6.8K
R421 150K
R420 39K
R419 10K
GND
IDL5V
D.GND
C515 0.01
C516 47/16
L506 100
C470 10/16
ANC.VOL
IV.OUT
GND
GND
AL5V
TO VIDEO PCB
C428 33P CH
X401 8MHz
C429 22P CH
L503 100μ
C509 0.01
C510 47/6.3
IC501
μPD6450CX-515
BUSY
CLK
STB
S.DATA
VDD
NC
LOSC OUT
LOSC IN
VSS
V.IN
V.OUT
VUL
VBL
VCL
H.Sync
V.Sync
XOUT
XIN
R504 750
R505 2.4K
C504 18P CH
C505 18P CH
X501 17.73MHz
C506 150P
R516 4.7K
DTA114ES TR501
R506 1.8K
C507 0.01
JS501
JS502 EK ONLY
TR502 DTA114ES
R507 2.2K
C508 0.01
R508 4.7K
R509 10K
R510 10K
TR503 2SC3330
R511 4.7K
R512 1K
R513 51K
R514 4.3K
D501
EXCEPT EK
C513 10/16
TR504 DTC144ES
L504 33
C511 39P
R515 510
TR506 2SC3330
C512 0.01
TR507 DTC144ES
R517 470
TR505 2SA1317
R518 6.8K
TR509 2SA1317
R519 24K
C514 22/6.3
R520 4.7K
TR508 2SA1317
IC502 MM1068XS
X502 CSB500F40
C517 220P
R521 220
R522 2.2K
C518
C519 0.0047
C520 4.7/25
C521 47/6.3
C522 0.01
C523 560P
C524 4.7/25
R524 1K
R525 68K
C525 470P
R526 560
R527 1K
R528 560
R529 430
TR510 2SA1317
R499 10K
YV.OUT
AFC SYNC
PAL
AFC-H
GND
GND
PICT
C.SYNC

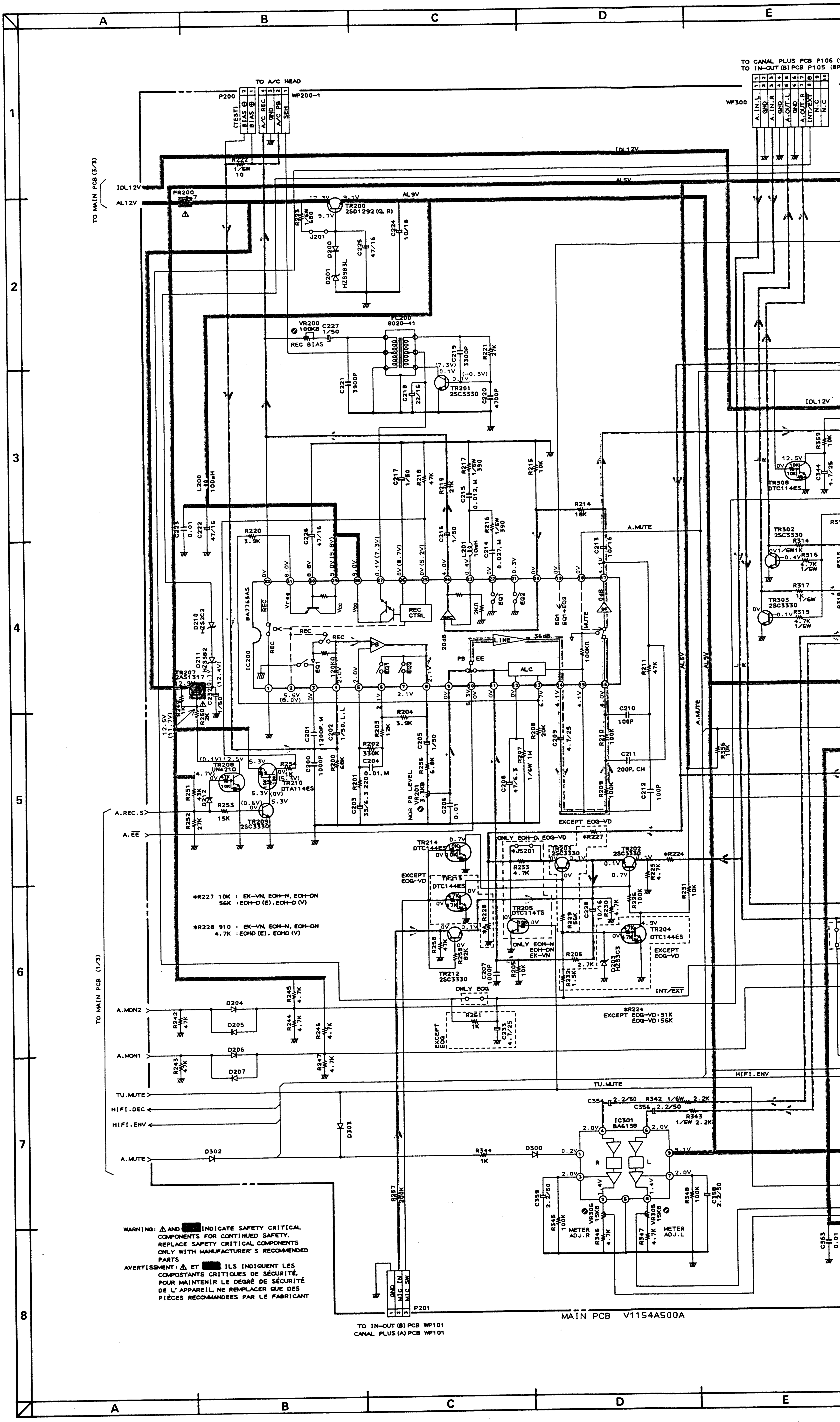
VS-F1000EK-VN/EOG-VD
VS-F1010EOH-N/EOH-D
VS-F1030EOH-DN
MAIN 1/3
(SERVO/SYSCON BLK)
SCHEMATIC DIAGRAM

No.16-3 V115403M
A1

E:
ESS OTHERWISE SPECIFIED
RESISTORS IN OHMS
CAPACITORS IN μF
INDUCTORS IN μH(K)
DIODES ARE 1SS131T

B (POWER SUPPLY) LINE
CAPSTAN SPEED CONTROL LINE
CAPSTAN PHASE CONTROL LINE
DRUM SPEED CONTROL LINE
DRUM PHASE CONTROL LINE
VIDEO SIGNAL LINE

INDICATED VOLTAGES WERE MEASURED DURING PB MODE. (TAPE SPEED:SP)


A
B
C
D
E
1
2
3
4
5
6
7
8
TO A/C HEAD
P200
WP200-1
(TEST)
BIAS ⊖
BIAS ⊕
A/C REC
GND
A/C PB
SEH
TO CANAL PLUS PCB P106
TO IN-OUT (B) PCB P105
WP300
A.IN.L
GND
A.IN.R
GND
A.OUT.L
GND
A.OUT.R
INT/EXT
N.C
N.C
TO MAIN PCB (3/3)
IDL12V
AL12V
AL9V
AL5V
FR200
R222 1/6W 10
R223 1/6W 680
TR200 2SD1292 (Q, R)
J201
D200
D201 HZS9B3L
C225 47/16
C224 10/16
VR200 100KB
REC BIAS
C227 1/50
FL200 8020-41
TR201 2SC3330
C219 3300P
R221 27K
C220 4700P
C221 3900P
C218 22/16
L200 100µH
C223 0.01
C222 47/16
R220 3.9K
C226 47/16
C217 1/50
R218 47K
R219 27K
R217 1/6W 390
R215 10K
C215 0.012, M 1/6W
C216 1/50
L201 10mH
C214 0.027, M
R216 1/6W 390
R214 18K
C213 10/16
A.MUTE
IC200 BA7765AS
REC
Vref
Vcc
REC CTRL
EQ1
EQ2
EQ1+EQ2
MUTE
PB
EE
LINE
ALC
36dB
20dB
0dB
120KΩ
100KΩ
2KΩ
D210 HZS2C2
D211 HZS9B2
TR207 2SA1317
C232 1/50
R230 2K
TR208 UN4210
TR210 DTA114ES
TR209 2SC3330
R254
R251 43K
R253 15K
R252 27K
C201 1200P, M
C202 1/50, L.L
C200 1000P
R200 68K
R204 3.9K
R202 330K
R203 12K
C204 01, M
R201 220
C203 33/6.3
R256 6.8K
C205 1/50
NOR PB LEVEL
VR201 3.3KB
C206 0.01
C208 47/6.3
R207 1/6W 1M
R208 20K
C209 4.7/25
R210 100K
C210 100P
C211 200P, CH
R209 100K
C212 100P
R211 47K
A.REC.S
A.EE
EXCEPT EOG-VD
ONLY EOH-D, EOG-VD
*R227
*J5201
R233 4.7K
TR203 2SC3330
TR202 2SC3330
*R224
R225 4.7K
TR214 DTC144ES
EXCEPT EOG-VD
TR213 DTC144ES
*R228
TR205 DTC114TS
ONLY EOH-N EOH-DN EK-VN
R229 56K
C228 10/16
R226 100K
R231 10K
TR204 DTC144ES
EXCEPT EOG-VD
D203 HZS3C3
R206 2.7K
R232 1.5K
R258 47K
R259 82K
TR212 2SC3330
C207 1000P
R205 10K
INT/EXT
ONLY EOG
R261 1K
C233 4.7/25
EXCEPT EOG
TO MAIN PCB (1/3)
A.MON2
A.MON1
D204
D205
D206
D207
R242 47K
R243 47K
R244 4.7K
R245 4.7K
R246 4.7K
R247 4.7K
TU.MUTE
HIFI.DEC
HIFI.ENV
A.MUTE
D302
D303
R344 1K
D300
C354 2.2/50
R342 1/6W 2.2K
C356 2.2/50
R343 1/6W 2.2K
IC301 BA6138
C359 2.2/50
R345 100K
VR306 15KB
METER ADJ.R
R346 1K
R347 4.7K
VR305 15KB
METER ADJ.L
R348 100K
C358 2.2/50
R257 200K
P201
GND
MIC IN
MIC SW
TO IN-OUT (B) PCB WP101
CANAL PLUS (A) PCB WP101
TR308 DTC144ES
R359 10K
C344 4.7/25
TR302 2SC3330
R314
R316 4.7K 1/6W
R317 1/6W
TR303 2SC3330
R319 4.7K 1/6W
R356 10K
IDL12V
HIFI.ENV
C363 0.01

*R227 10K : EK-VN, EOH-N, EOH-DN
56K : EOH-D (E), EOH-D (V)

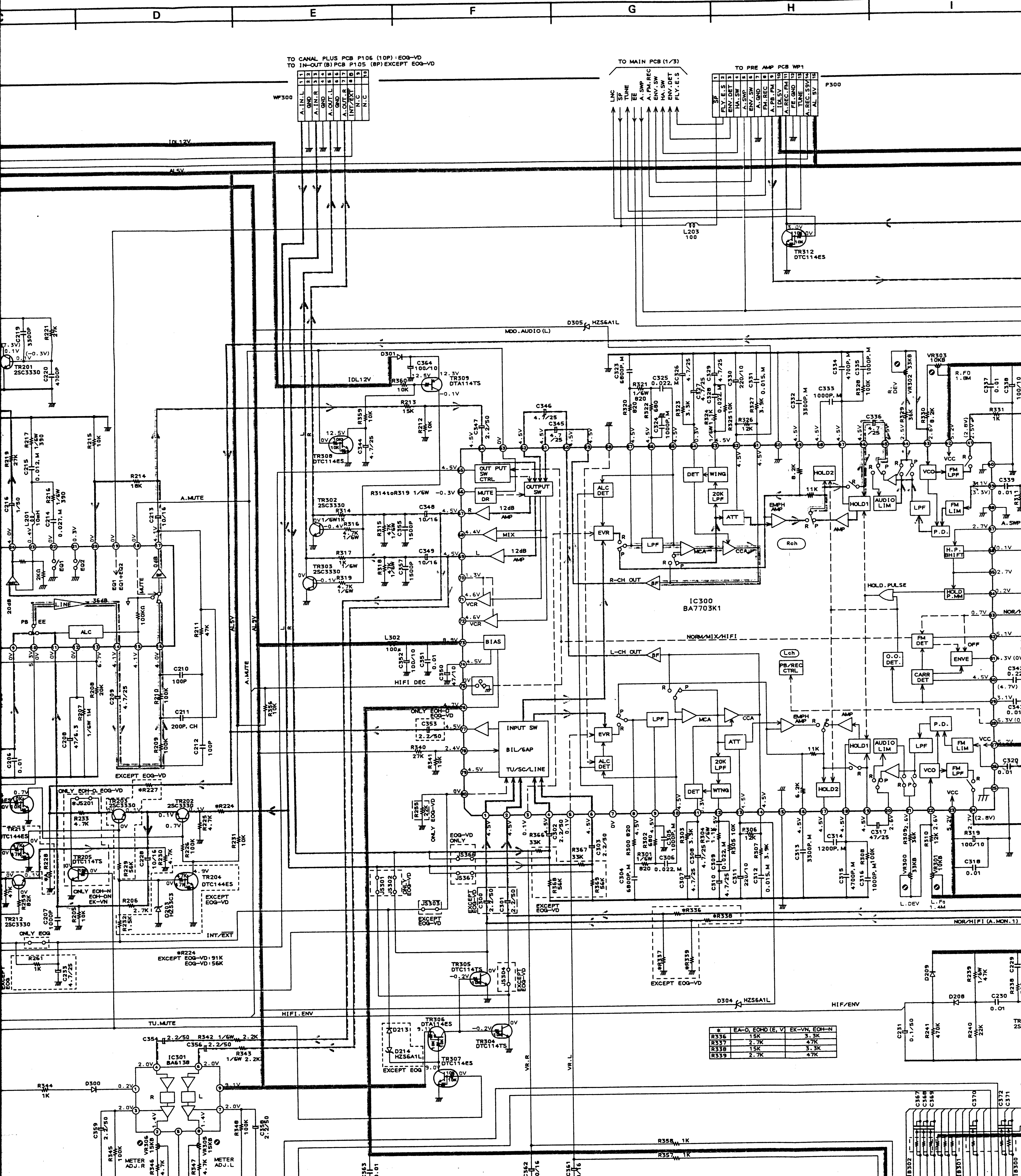
*R228 910 : EK-VN, EOH-N, EOH-DN
4.7K : EOHD (E), EOHD (V)

*R224
EXCEPT EOG-VD : 91K
EOG-VD : 56K

WARNING: ⚠ AND ■ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER' S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ■ ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L' APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

MAIN PCB V1154A500A


C
D
E
F
G
H
I
TO CANAL PLUS PCB P106 (10P) : EOG—VD
TO IN—OUT (B) PCB P105 (8P) EXCEPT EOG—VD
WF300
A.IN.L
GND
A.IN.R
GND
A.OUT.L
GND
A.OUT.R
INT/EXT
N.C
N.C
TO MAIN PCB (1/3)
LNC
SP
TUNE
EE
A.SWP
A.FM.REC
ENV.SW
HA.SW
ENV.DET
FLY.E.S
TO PRE AMP PCB WP1
P300
SP
FLY.E.S
ENV.DET
HA.SW
A.SWP
ENV.SW
A.GND
FM.REC
A.PB.FM
IDL 5V
A.REC.FM
A.FE.GND
TUNE
A.REC.S9V
AL 5V
IDL12V
AL5V
L203
100
TR312
DTC114ES
D305
HZS6A1L
MOD.AUDIO (L)
TR201
2SC3330
TR309
DTA114TS
TR308
DTC114ES
TR302
2SC3330
TR303
2SC3330
A.MUTE
LINE
36dB
ALC
PB
EE
OUT PUT SW CTRL
OUTPUT SW
MUTE DR
12dB AMP
MIX
R314toR319 1/6W
VCR
BIAS
HIFI DEC
L302
100μ
INPUT SW
BIL/SAP
TU/SC/LINE
ALC DET
EVR
LPF
MCA
CCA
DET
WTNG
20K LPF
ATT
EMPH AMP
Rch
Lch
PB/REC CTRL
R-CH OUT
L-CH OUT
BF
IC300
BA7703K1
NORM/MIX/HIFI
HOLD.PULSE
HOLD1
HOLD2
AUDIO LIM
VCO
FM LPF
FM LIM
P.D.
H.P. SHIFT
HOLD P.MM
FM DET
ENVE
O.O. DET.
CARR DET
OFF
NOR/HIFI (A.MON.1)
VR303
VR302
VR300
VR301
R.DEV
L.DEV
R.FO
L.Fo
TR202
2SC3330
TR203
2SC3330
TR204
DTC144ES
TR205
DTC114TS
TR212
2SC3330
TR213
DTC144ES
ONLY EOH-D, EOG-VD
ONLY EOG
EXCEPT EOG-VD
EXCEPT EOG—VD
*R224
EXCEPT EOG—VD : 91K
EOG—VD : 56K
INT/EXT
TU.MUTE
HIFI.ENV
TR305
DTC114TS
TR306
DTA114ES
TR304
DTC114TS
TR307
DTC114ES
D213
D214
HZS6A1L
EXCEPT EOG
IC301
BA6138
METER ADJ.R
METER ADJ.L
VR306
15KB
VR305
15KB
D300
D304
HZS6A1L
HIF/ENV
VR.R
VR.L
EXCEPT EOG—VD
R358 1K
R357 1K
P301
VR.L
Vref
VR.R
A.GND
AC3
AFT
BAND.B
BAND.A
AFT.H
AFT.L
P.DOWN
-35V
PMM
TV.MODE
TV/VCR
AL.DET
AR.DET
NICAM/FM
C4
TO OPERATION (1) PCB WP1

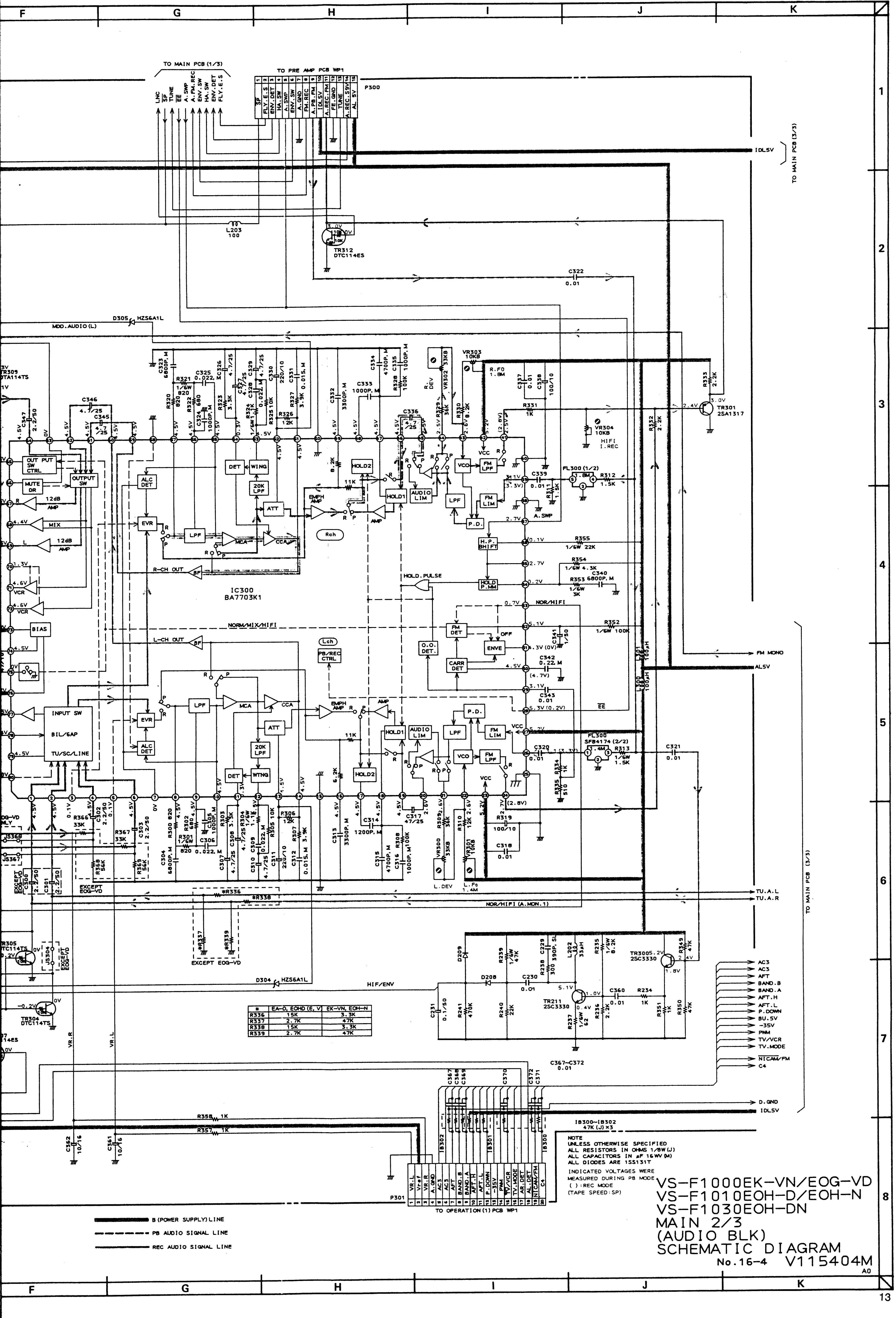
*	EA—D, EOHD (E, V)	EK—VN, EOH—N
R336	15K	3.3K
R337	2.7K	47K
R338	15K	3.3K
R339	2.7K	47K

MAIN PCB V1154A500A

B (POWER SUPPLY) LINE

PB AUDIO SIGNAL LINE

REC AUDIO SIGNAL LINE


F
G
H
I
J
K
1
2
3
4
5
6
7
8
TO MAIN PCB (1/3)
LINC
SP
TUNE
EE
A.SWP
A.FM.REC
ENV.SW
HA.SW
ENV.DET
FLY.E.S
TO PRE AMP PCB WP1
P300
SP
FLY.E.S
ENV.DET
HA.SW
A.SWP
ENV.SW
A.GND
FM.REC
A.PB.FM
IDL5V
A.REC.FM
FE.GND
TUNE
A.REC.S9V
AL.5V
IDL5V
TO MAIN PCB (3/3)
L203
100
TR312
DTC114ES
C322
0.01
D305 HZS6A1L
MOD.AUDIO(L)
TR309
DTA114TS
IC300
BA7703K1
OUTPUT SW
OUT PUT SW CTRL
MUTE DR
12dB AMP
MIX
ALC DET
EVR
LPF
MCA
CCA
ATT
20K LPF
DET
WING
EMPH AMP
HOLD1
HOLD2
AUDIO LIM
VCO
FM LPF
FM LIM
P.D.
H.P. SHIFT
HOLD P.MM
HOLD.PULSE
FM DET
ENVE
CARR DET
O.O. DET.
PB/REC CTRL
Rch
Lch
R-CH OUT
L-CH OUT
BIAS
INPUT SW
BIL/6AP
TU/SC/LINE
NORM/MIX/HIFI
NOR/HIFI
VR303 10KB
VR302 33KB
VR304 10KB HIFI I.REC
VR300 33KB
VR301 10KB
L.DEV
L.F0 1.4M
R.DEV
R.F0 1.8M
TR301 2SA1317
FL300 (1/2)
FL300 SFB4174 (2/2)
A.SWP
FM MONO
AL5V
L300 100μH
L301 100μH
TU.A.L
TU.A.R
NOR/HIFI (A.MON.1)
EXCEPT EOG-VD
TR305 DTC114TS
JS304
TR304 DTC114TS
D304 HZS6A1L
HIF/ENV
D209
D208
TR211 2SC3330
TR300 2SC3330
L202 33μH
AC3
AFT
BAND.B
BAND.A
AFT.H
AFT.L
P.DOWN
BU.5V
-35V
PWM
TV/VCR
TV.MODE
NICAM/FM
C4
D.GND
IDL5V
C367–C372 0.01
IB300–IB302 47K (J)×3
R358 1K
R357 1K
C362 10/16
C361 10/16
VR.L
VR.R
P301
TO OPERATION (1) PCB WP1
VR.L
Vref
VR.R
A.GND
AC3
AFT
BAND.B
BAND.A
AFT.H
AFT.L
P.DOWN
-35V
PWM
TV/VCR
TV.MODE
AL.DET
NICAM/FM
C4

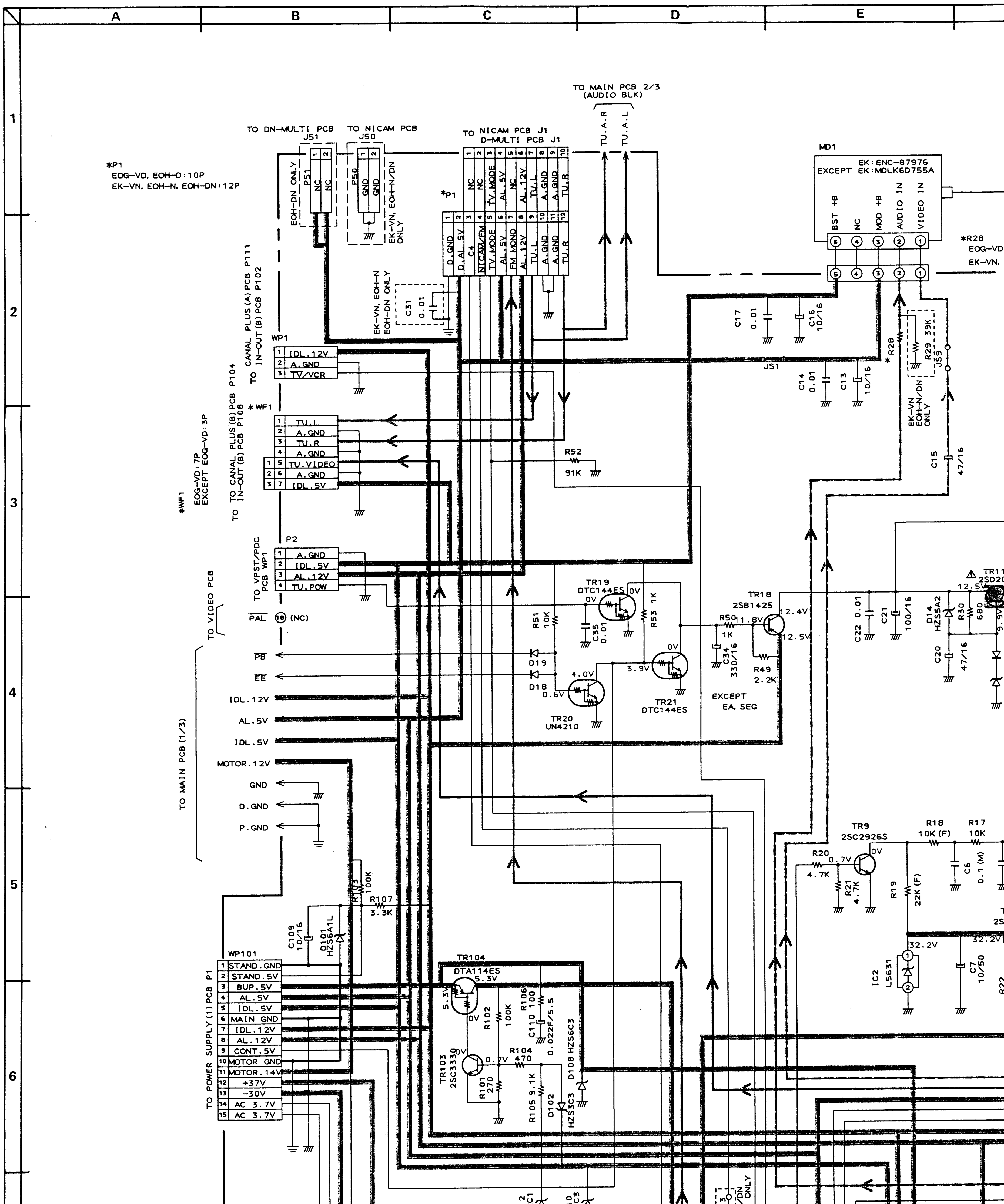
*	EA-D, EOHD (E, V)	EK-VN, EOH-N
R336	15K	3.3K
R337	2.7K	47K
R338	15K	3.3K
R339	2.7K	47K

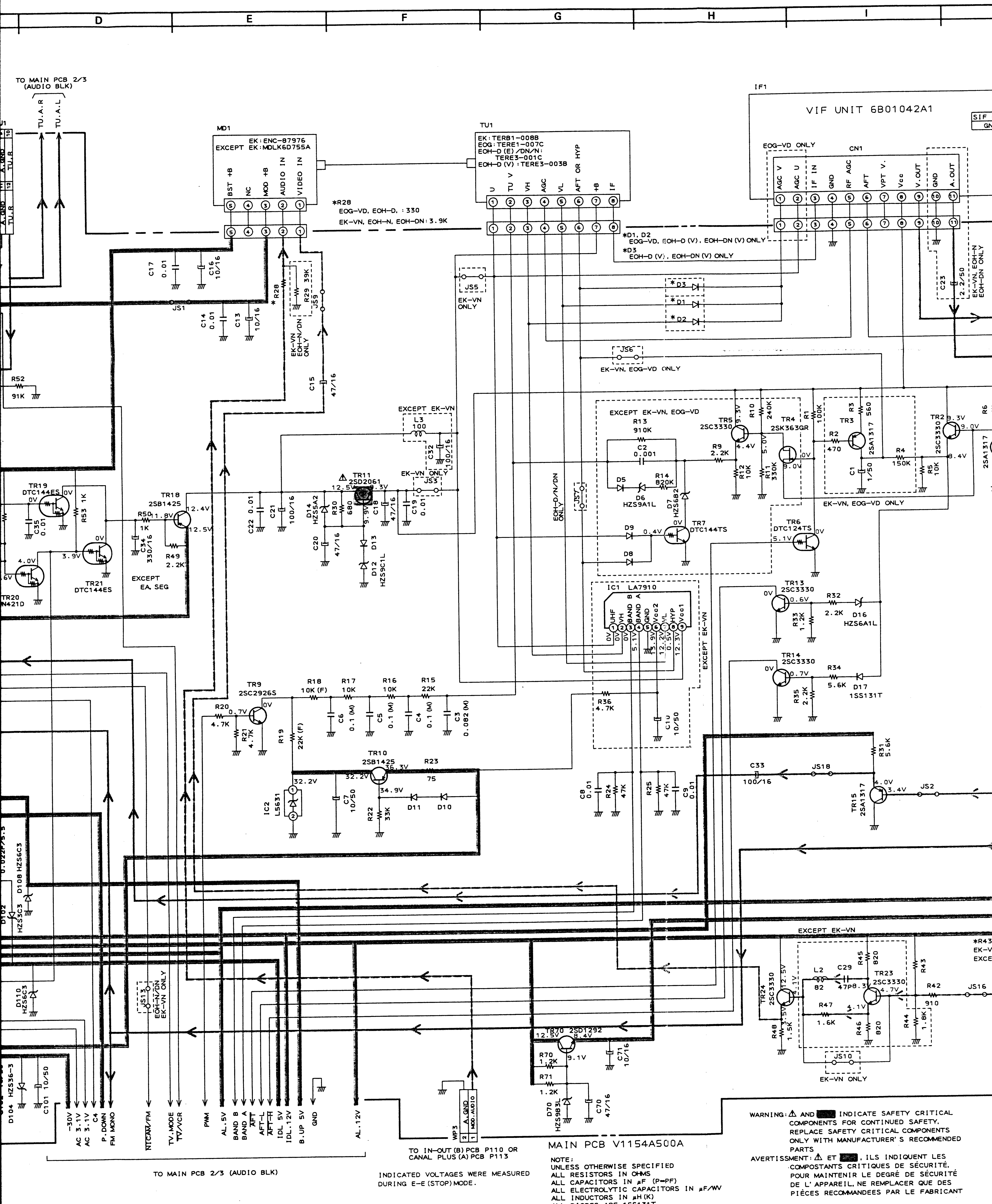
B (POWER SUPPLY) LINE
PB AUDIO SIGNAL LINE
REC AUDIO SIGNAL LINE

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/8W (J)
ALL CAPACITORS IN μF 16WV (M)
ALL DIODES ARE 1SS131T

INDICATED VOLTAGES WERE
MEASURED DURING PB MODE
( ) : REC MODE
(TAPE SPEED: SP)

VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
MAIN 2/3
(AUDIO BLK)
SCHEMATIC DIAGRAM
No.16-4 V115404M
A0


A
B
C
D
E
1
2
3
4
5
6
7
8
TO MAIN PCB 2/3 (AUDIO BLK)
TU.A.R
TU.A.L
TO DN-MULTI PCB J51
TO NICAM PCB J50
TO NICAM PCB J1 D-MULTI PCB J1
EOH-DN ONLY
P51
NC
P50
GND
EK-VN, EOH-N/DN ONLY
*P1
EOG-VD, EOH-D:10P
EK-VN, EOH-N, EOH-DN:12P
D.GND
D.AL.5V
C4
NICAM/FM
TV.MODE
AL.5V
FM MONO
AL.12V
TU.L
A.GND
TU.R
EK-VN, EOH-N EOH-DN ONLY
C31 0.01
MD1
EK:ENC-87976
EXCEPT EK:MDLK6D755A
BST +B
MOD +B
AUDIO IN
VIDEO IN
*R28
EOG-VD
EK-VN,
C17 0.01
C16 10/16
JS1
C14 0.01
C13 10/16
R28
R29 39K
JS9
EK-VN EOH-N/DN ONLY
C15 47/16
TO CANAL PLUS (A) PCB P111 IN-OUT (B) PCB P102
WP1
IDL.12V
A.GND
TV/VCR
TO CANAL PLUS (B) PCB P104 IN-OUT (B) PCB P108
*WF1
EOG-VD:7P
EXCEPT EOG-VD:3P
TU.L
TU.R
TU.VIDEO
IDL.5V
R52 91K
TO VPST/PDC PCB WP1
P2
AL.12V
TU.POW
TO VIDEO PCB
PAL
(NC)
PB
EE
TO MAIN PCB (1/3)
IDL.12V
AL.5V
IDL.5V
MOTOR.12V
GND
D.GND
P.GND
TR19 DTC144ES
0V
R51 10K
C35 0.01
R53 1K
D19
D18
4.0V
0.6V
3.9V
TR20 UN4210
TR21 DTC144ES
TR18 2SB1425
R50 1K
1.8V
12.4V
12.5V
C34 330/16
R49 2.2K
EXCEPT EA SEG
C22 0.01
C21 100/16
D14 HZS5A2
R30 680
C20 47/16
TR11 2SD20
12.5V
9.9V
TR9 2SC2926S
R18 10K (F)
R17 10K
R20 4.7K
0.7V
R21 4.7K
R19 22K (F)
C6 0.1 (M)
32.2V
IC2 L5631
C7 10/50
R22
R103 100K
R107 3.3K
C109 10/16
D101 HZS6A1L
WP101
STAND.GND
STAND.5V
BUP.5V
AL.5V
IDL.5V
MAIN GND
IDL.12V
AL.12V
CONT.5V
MOTOR GND
MOTOR.14V
+37V
-30V
AC 3.7V
AC 3.7V
TO POWER SUPPLY (1) PCB P1
TR104 DTA114ES
5.3V
R102 100K
R106 100
C110 0.022F/5.5
TR103 2SC3330
R104 470
R101 270
R105 9.1K
D102 HZS3C3
D108 HZS6C3
D112 HZS12C1
D110 HZS6C3
JS13
EOH-N/DN EK-VN ONLY
D107 HZS16-1
C104 10/25
D105 HZS36-3
C102 10/50
D104 HZS36-3
C101 10/50
-30V
AC 3.1V
AC 3.1V
C4
P.DOWN
FM MONO
NICAM/FM
TV.MODE
TV/VCR
PWM
AL.5V
BAND B
BAND A
AFT
AFT-L
AFT-H
IDL 5V
IDL.12V
B.UP 5V
GND
AL.12V
TO MAIN PCB 2/3 (AUDIO BLK)
B (POWER SUPPLY) LINE
PB AUDIO SIGNAL LINE
REC AUDIO SIGNAL LINE
PB VIDEO SIGNAL LINE
REC VIDEO SIGNAL LINE


D
E
F
G
H
I
TO MAIN PCB 2/3 (AUDIO BLK)
TU.A.R
TU.A.L
MD1
EK: ENC-87976
EXCEPT EK: MDLK6D755A
BST +B
NC
MOD +B
AUDIO IN
VIDEO IN
TU1
EK: TER81-008B
EOG: TERE1-007C
EOH-D (E)/DN/N: TERE3-001C
EOH-D (V): TERE3-003B
U
TU V
VH
AGC
VL
AFT OR HYP
+B
IF
*R28
EOG-VD, EOH-D, : 330
EK-VN, EOH-N, EOH-DN: 3.9K
*D1, D2
EOG-VD, EOH-D (V), EOH-DN (V) ONLY
*D3
EOH-D (V), EOH-DN (V) ONLY
IF1
VIF UNIT 6B01042A1
EOG-VD ONLY
CN1
AGC V
AGC U
IF IN
GND
RF AGC
AFT
VPT V.
Vcc
V.OUT
GND
A.OUT
SIF
EK-VN, EOH-N EOH-DN ONLY
C23 2.2/50
JS5
EK-VN ONLY
JS6
EK-VN, EOG-VD ONLY
JS1
JS9
EK-VN EOH-N/DN ONLY
C17 0.01
C16 10/16
C14 0.01
C13
10/16
R29 39K
C15 47/16
R52 91K
EXCEPT EK-VN
L3 100
C32 100/16
TR11 2SD2061
EK-VN ONLY
JS3
TR19 DTC144ES
C35 0.01
R53 1K
TR18 2SB1425
R50 1K
C34 330/16
R49 2.2K
EXCEPT EA, SEG
TR21 DTC144ES
TR20
C22 0.01
C21
100/16
D14 HZS5A2
R30 680
C18 47/16
C19 0.01
C20 47/16
D13
D12 HZS9C1L
EXCEPT EK-VN, EOG-VD
R13 910K
C2 0.001
R9 2.2K
TR5 2SC3330
R10 240K
TR4 2SK363GR
R12 10K
R11 330K
D5
D6 HZS9A1L
R14 820K
D7 HZS6B2
EOH-D/N/DN ONLY
JS7
D9
D8
TR7 DTC144TS
TR6 DTC124TS
R1 100K
R3 560
TR3
R2 470
2SA1317
C1 1/50
R4 150K
R5 10K
EK-VN, EOG-VD ONLY
TR2 2SC3330
R6
2SA1317
IC1 LA7910
UHF
VH
BAND B
BAND A
GND
Vcc2
VL
HYP
Vcc1
EXCEPT EK-VN
R36 4.7K
C10 10/50
TR13 2SC3330
R32 2.2K
D16 HZS6A1L
R33 1.2K
TR14 2SC3330
R34 5.6K
D17 1SS131T
R35 2.2K
TR9 2SC2926S
R20 4.7K
R21 4.7K
R18 10K (F)
R17 10K
R16 10K
R15 22K
C6 0.1 (M)
C5 0.1 (M)
C4 0.1 (M)
C3 0.082 (M)
R19 22K (F)
TR10 2SB1425
R23 75
IC2 L5631
C7 10/50
R22 33K
D11
D10
C8 0.01
R24 47K
R25 47K
C9 0.01
C33 100/16
JS18
R31 5.6K
TR15 2SA1317
JS2
D108 HZS6C3
D102 HZS3C3
D110 HZS6C3
JS13
EOH-N/DN EK-VN ONLY
D104 HZS36-3
C101 10/50
TR70 2SD1292
R70 1.2K
R71 1.2K
C71 10/16
D70 HZS9B3L
C70 47/16
WP3
A.GND
MOD.AUDIO
EXCEPT EK-VN
L2 82
C29 47P
R45 820
TR23 2SC3330
R43
*R43
TR24 2SC3330
R47 1.6K
R46 820
R42 910
R44 1.8K
R48 1.5K
JS10
EK-VN ONLY
JS16
-30V
AC 3.1V
AC 3.1V
C4
P. DOWN
FM MONO
NICAM/FM
TV. MODE
TV/VCR
PWM
AL.5V
BAND B
BAND A
AFT
AFT-L
AFT-H
IDL 5V
IDL.12V
B.UP 5V
GND
AL.12V
TO IN-OUT (B) PCB P110 OR CANAL PLUS (A) PCB P113

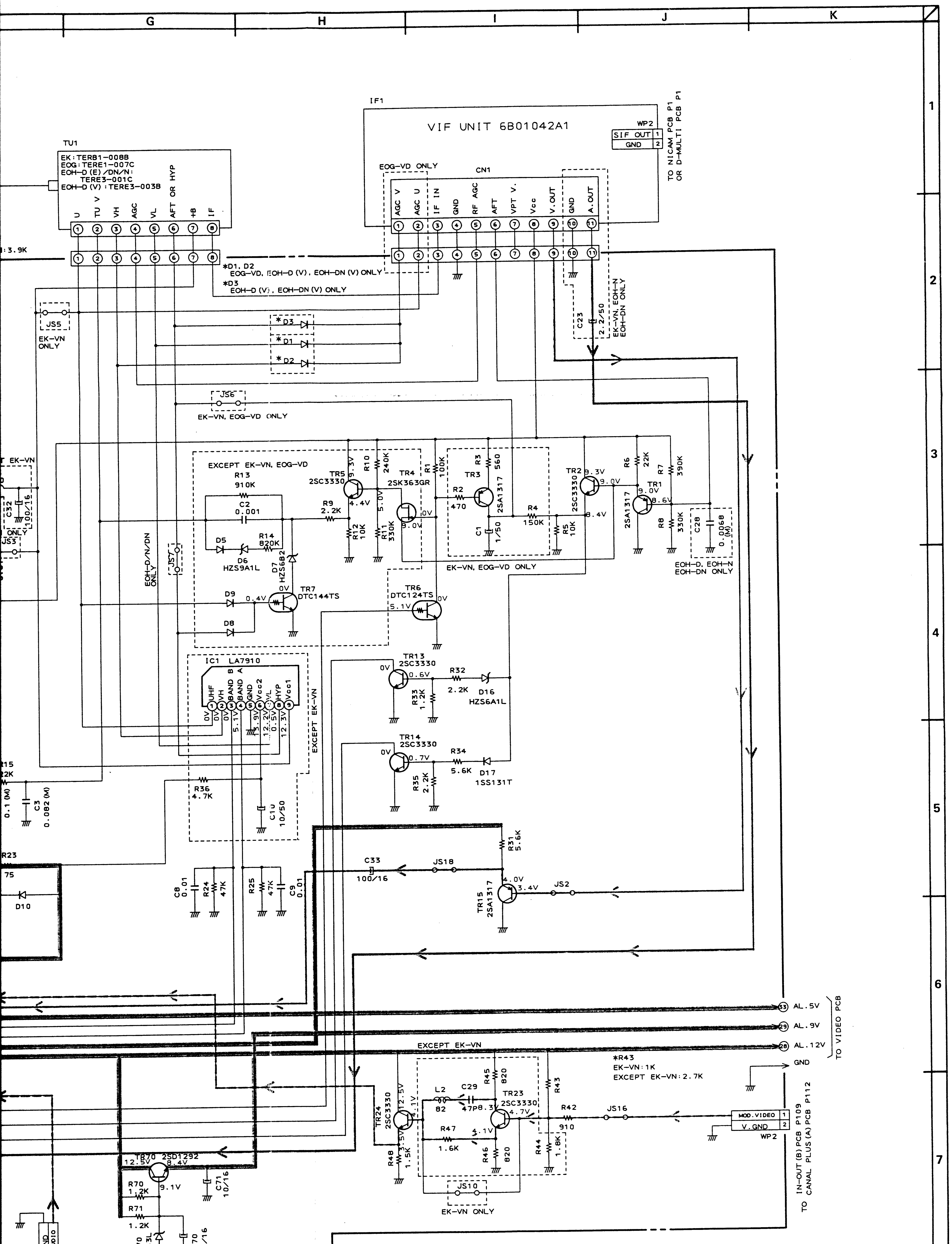
INDICATED VOLTAGES WERE MEASURED DURING E-E (STOP) MODE.

MAIN PCB V1154A500A

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV
ALL INDUCTORS IN μH (K)
ALL DIODES ARE 1SS131T

WARNING: ⚠ AND ▨ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ▨, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT



G
H
I
J
K
1
2
3
4
5
6
7
8
IF1
VIF UNIT 6B01042A1
WP2
SIF OUT 1
GND 2
TO NICAM PCB P1 OR D-MULTI PCB P1
EOG-VD ONLY
CN1
AGC V
AGC U
IF IN
GND
RF AGC
AFT
VPT V.
Vcc
V.OUT
GND
A.OUT
TU1
EK:TERB1-008B
EOG:TERE1-007C
EOH-D (E)/DN/N: TERE3-001C
EOH-D (V) :TERE3-003B
U
TU V
VH
AGC
VL
AFT OR HYP
+B
IF
:3.9K
*D1, D2
EOG-VD, EOH-D (V), EOH-DN (V) ONLY
*D3
EOH-D (V), EOH-DN (V) ONLY
JS5
EK-VN ONLY
*D3
*D1
*D2
C23
2.2/50
EK-VN, EOH-N EOH-DN ONLY
JS6
EK-VN, EOG-VD ONLY
EXCEPT EK-VN, EOG-VD
R13
910K
C2
0.001
R9
2.2K
TR5
2SC3330
9.3V
R10
240K
4.4V
5.0V
TR4
2SK363GR
R1
100K
0V
9.0V
R12
10K
R11
330K
D5
R14
820K
D6
HZS9A1L
D7
HZS6B2
D9
0.4V
0V
TR7
DTC144TS
D8
EOH-D/N/DN ONLY
JS7
TR3
R3
560
R2
470
2SA1317
C1
1/50
R4
150K
R5
10K
EK-VN, EOG-VD ONLY
TR6
DTC124TS
5.1V
0V
TR2
2SC3330
9.3V
9.0V
8.4V
R6
22K
R7
390K
TR1
2SA1317
9.0V
8.6V
R8
330K
C28
0.0068 (M)
EOH-D, EOH-N EOH-DN ONLY
T EK-VN
C32
100/16
ONLY
JS3
IC1 LA7910
UHF
VH
BAND B
BAND A
GND
Vcc2
VL
HYP
Vcc1
0V
0V
0V
5.1V
11.9V
12.2V
0.5V
12.3V
EXCEPT EK-VN
R36
4.7K
C10
10/50
TR13
2SC3330
0V
0.6V
R32
2.2K
D16
HZS6A1L
R33
1.2K
TR14
2SC3330
0V
0.7V
R34
5.6K
D17
1SS131T
R35
2.2K
R15
22K
0.1 (M)
C3
0.082 (M)
R23
75
D10
C8
0.01
R24
47K
R25
47K
C9
0.01
C33
100/16
JS18
R31
5.6K
4.0V
3.4V
JS2
TR15
2SA1317
AL.5V
AL.9V
AL.12V
TO VIDEO PCB
GND
EXCEPT EK-VN
*R43
EK-VN:1K
EXCEPT EK-VN:2.7K
L2
82
C29
47P
R45
820
R43
TR23
2SC3330
8.3V
4.7V
TR24
2SC3330
12.5V
5.1V
R47
1.6K
4.1V
3.5V
R48
1.5K
R46
820
R44
1.8K
R42
910
JS16
MOD.VIDEO 1
V.GND 2
WP2
TO IN-OUT (B) PCB P109 CANAL PLUS (A) PCB P112
JS10
EK-VN ONLY
TR70 2SD1292
12.5V
8.4V
9.1V
R70
1.2K
R71
1.2K
C71
10/16
D70
HZS9B3L
C70
47/16
WP3
A.GND
MOD.AUDIO

IN-OUT (B) PCB P110 OR
L PLUS (A) PCB P113

VOLTAGES WERE MEASURED
(STOP) MODE.

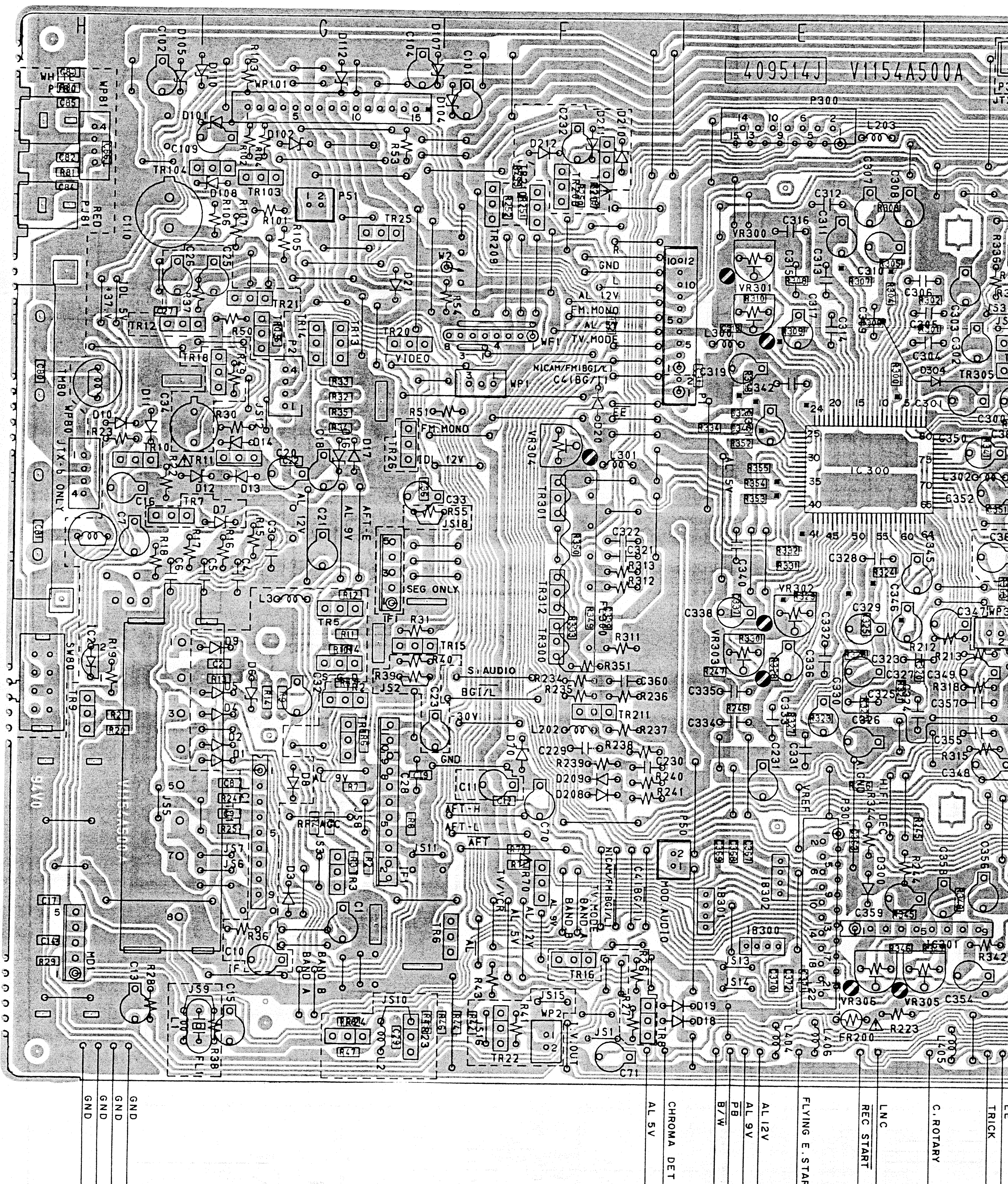
MAIN PCB V1154A500A

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV
ALL INDUCTORS IN μH(K)
ALL DIODES ARE 1SS131T

WARNING: ⚠ AND ■ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ■, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L' APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
MAIN 3/3
(RF BLK)
SCHEMATIC DIAGRAM
No.16-5 V115405M
A1

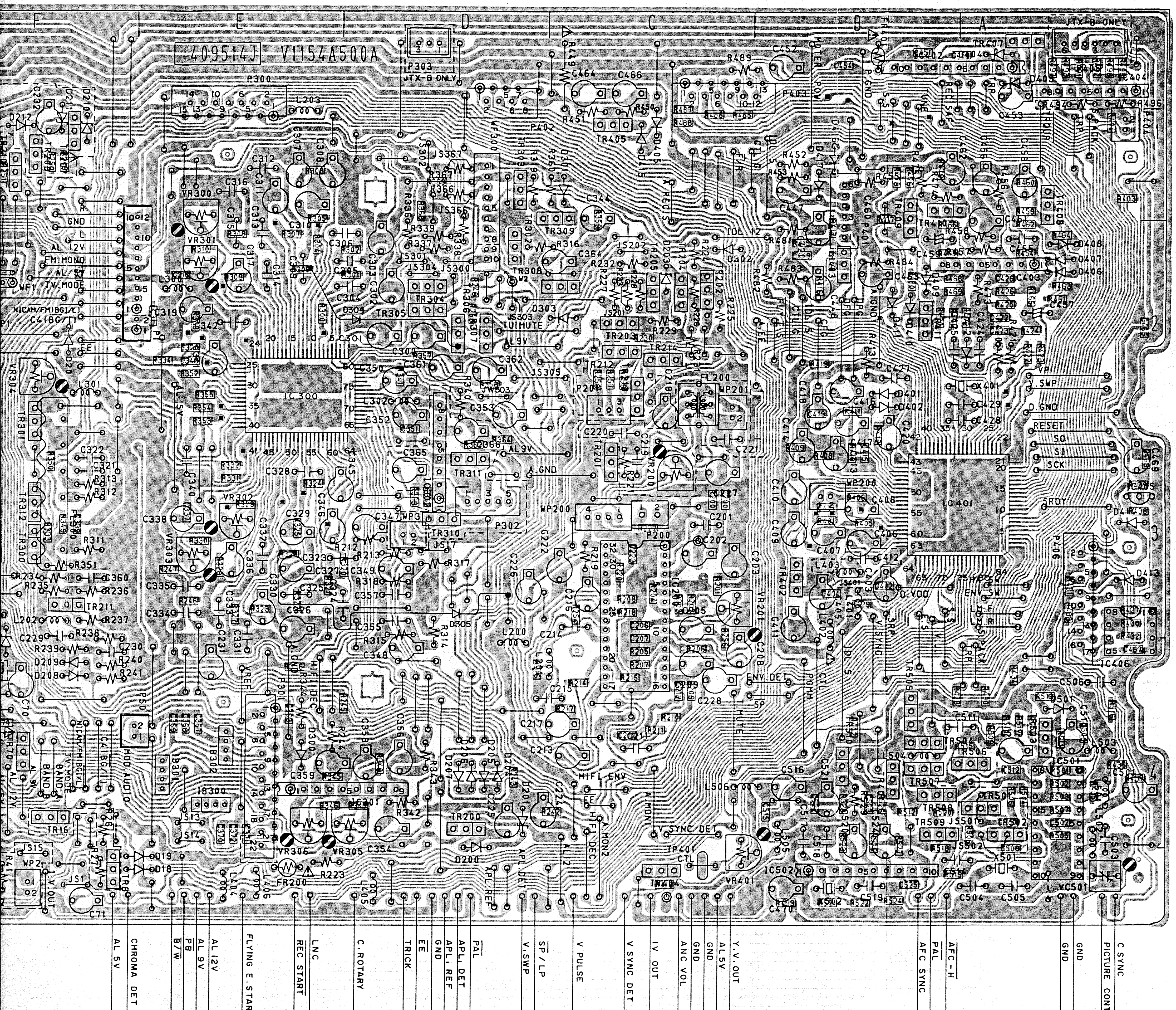

409514J V1154A500A
GND
GND
GND
GND
AL 5V
CHROMA DET
B/W
PB
AL 9V
AL 12V
FLYING E.START
REC START
LNC
C.ROTARY
TRICK
㊲
㊱
㉟
㉞
㉝
㉜
㉛
㉚
㉙
㉘
㉗
㉖
㉕
㉔
㉓
㉒

TO VIDEO PCB

MAIN PCB VII

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY,
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
RECOMMENDED PARTS

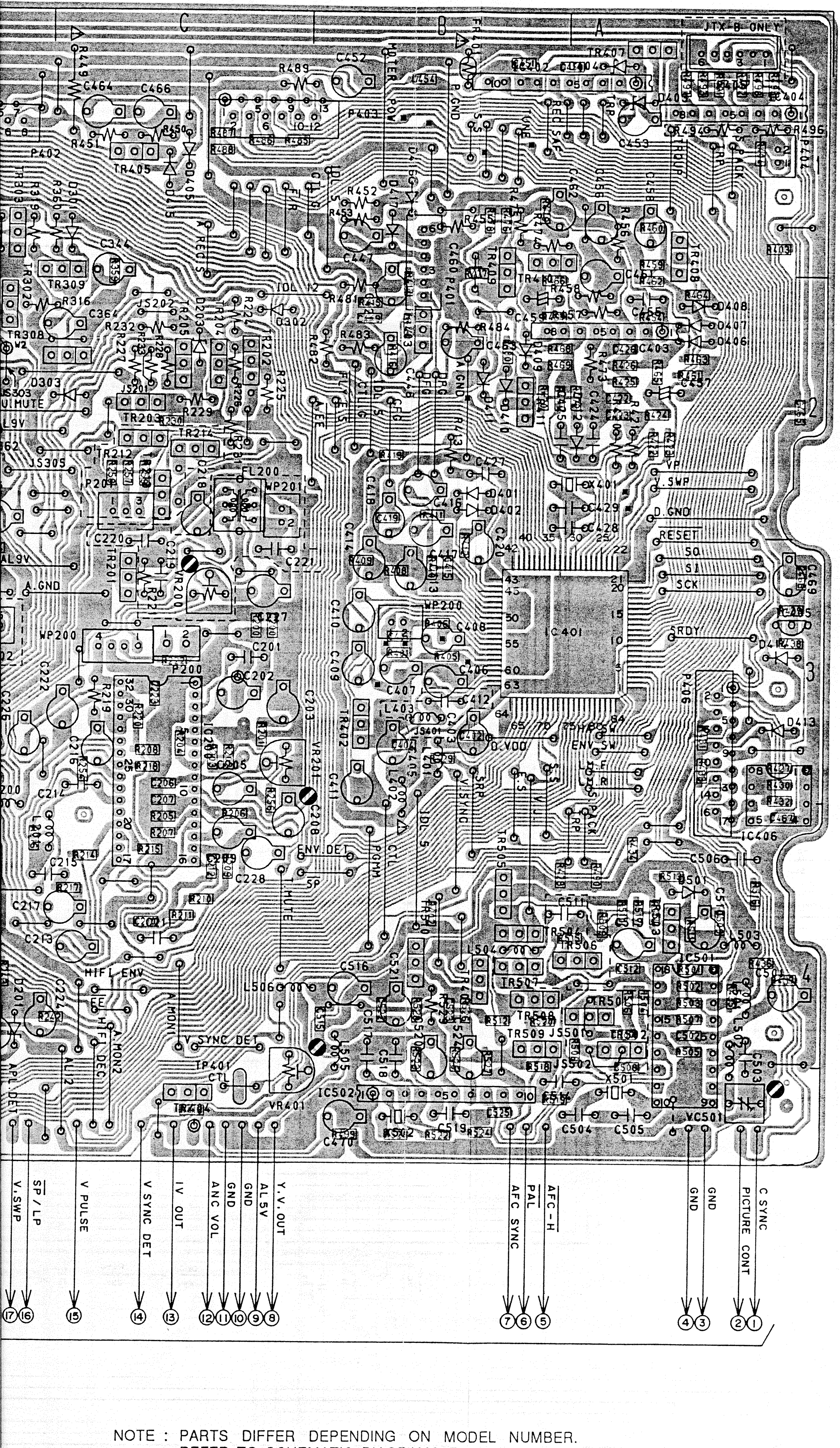
AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT



409514J
V1154A500A
F
E
D
C
B
A
JTX-B ONLY
P303
P300
P402
P403
IC300
IC401
IC406
IC502
FL200
AL 5V
CHROMA DET
B/W
PB
AL 9V
AL 12V
FLYING E. START
REC START
LNC
C. ROTARY
TRICK
EE
GND
APL. REF
APL. DET
PAL
V. SWP
SP / LP
V PULSE
V SYNC DET
IV OUT
ANC VOL
GND
GND
AL 5V
Y. V. OUT
AFC SYNC
PAL
AFC-H
GND
GND
PICTURE CONT
C SYNC
㉝
㉜
㉛
㉚
㉙
㉘
㉗
㉖
㉕
㉔
㉓
㉒
㉑
⑳
⑲
⑱
⑰
⑯
⑮
⑭
⑬
⑫
⑪
⑩
⑨
⑧
⑦
⑥
⑤
④
③
②
①
TO VIDEO PCB

MAIN PCB V1154A500A

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING
PARTS INFORMATION.



A
B
C
JTX-B ONLY
IC401
IC406
V.SWP
SP / LP
V PULSE
V SYNC DET
IV OUT
GND
ANC VOL
GND
AL.5V
Y.V. OUT
AFC SYNC
PAL
AFC-H
GND
GND
PICTURE CONT
C SYNC
⑰⑯
⑮
⑭
⑬
⑫⑪⑩⑨⑧
⑦⑥⑤
④③
②①

PRINCIPAL PARTS LOCATION

ICs

IC1	G4
IC2	H3
IC200	C3,4
IC300	E2
IC301	D,E4
IC302	D2,3
IC401	A,B3
IC402	A,B1
IC403	A,B2
IC404	A1
IC405	A3
IC406	A3
IC501	A4
IC502	B4

WIREs

WF1,1A,1B	F2
WF300,300A	D1,2

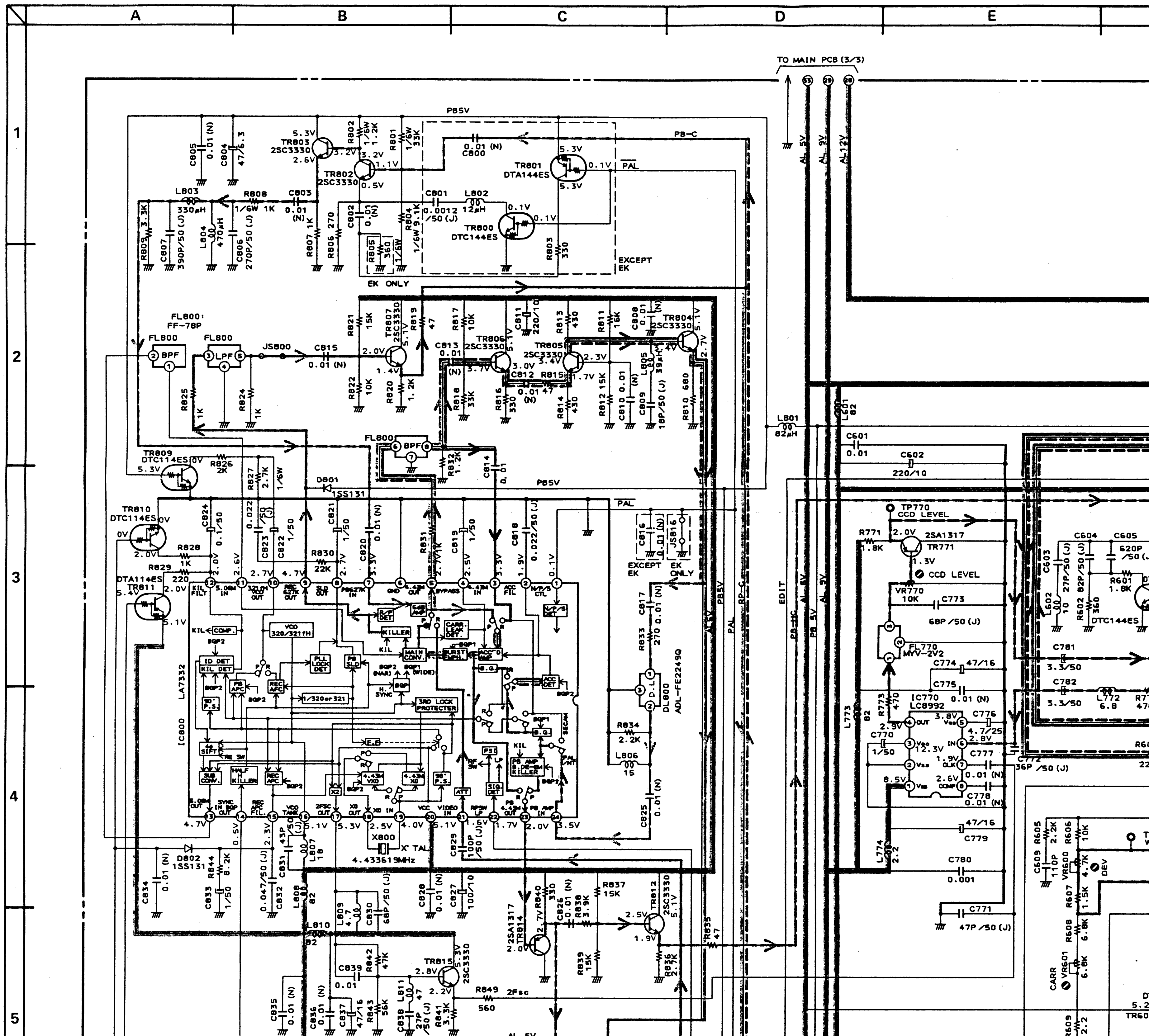
CONNECTORs

P1,1A	E,F2
P2	G2
P50	E,F4
P51	G1
P200	C3
P201	C2
P300	E1
P301,301A	E4
P302	D3
P303	D1
P401	B1,2
P402	D1
P403	B,C1
P404	A1
P405	A1
P406	A3

TRANSISTORs

TR1	G3
TR2	G3
TR3	G4
TR4	G3
TR5	G3
TR6	F4
TR7	H3
TR8	F4
TR9	H3
TR10	H2
TR11	G2
TR12	G,H2
TR13	G2
TR14	G2
TR15	G3
TR16	F4
TR18	G2
TR19	G2
TR20	G2
TR21	G2
TR22	F4
TR23	G4
TR24	G4
TR25	G1
TR26	G2
TR70	F4
TR103	G1
TR104	G1
TR200	D4
TR201	C3
TR202	C2
TR203	C2
TR204	C2
TR205	C2
TR207	F1
TR208	F1
TR209	F1
TR210	F1
TR211	F3
TR212	C2
TR213	C2
TR214	C2
TR300	F3
TR301	F2
TR302	D2
TR303	D1
TR304	D2
TR305	D2
TR306	D2
TR307	D2
TR308	C2
TR309	C1,D1
TR310	D3
TR311	D3
TR312	F3
TR401	B4
TR402	B3
TR403	B2
TR404	C4
TR405	C1
TR407	A1
TR408	A1
TR409	B1,2
TR410	A,B1
TR411	B2
TR501	A4
TR502	A4
TR503	A4
TR504	B4
TR505	B4
TR506	A4
TR507	B4
TR508	B4
TR509	B4
TR510	B4

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING
PARTS INFORMATION.


A
B
C
D
E
1
2
3
4
5
6
7
8
TO MAIN PCB (3/3)
AL 5V
AL 9V
AL 12V
PB5V
PB-C
PAL
TR803 2SC3330
TR802 2SC3330
TR801 DTA144ES
TR800 DTC144ES
EXCEPT EK
EK ONLY
FL800: FF-78P
FL800 BPF
FL800 LPF
JS800
TR807 2SC3330
TR806 2SC3330
TR805 2SC3330
TR804 2SC3330
TR809 DTC114ES
TR810 DTC114ES
TR811 DTA114ES
D801 1SS131
IC800 LA7332
DL800 ADL-FE2249Q
X800 4.433619MHz
D802 1SS131
TR814 2SA1317
TR812 2SC3330
TR815
AL 5V
TRICK
C SYNC
IC870 BA7025L
TR872 2SC3330
TR871 2SC3330
FL870 SFE-4.16MB
TP870 P/S
COMP1
COMP2
REG
EOG ONLY
TR881 2SC3330
TR882 2SC3330
TR884 2SC3330
D882 1SS131
D881 1SS131
L610 100
P800
PAL
S DET P
EDIT
TP770 CCD LEVEL
TR771 2SA1317
VR770 10K
FL770 MYV-2V2
IC770 LC8992
TR603 DTC144ES
TR604 2SC3330
JS600
REC Y
TR817 2SB1425
TR818 2SA1317
D603 1SS131
TR615 DTC144ES
P600
RP LC
VIDEO GND
REC S 9V
PB 5V
RP Y
VIDEO GND
COMP ON
V. SWP
PAL
AFC SYNC
PB-HC
RP-HC
CARR
DEV

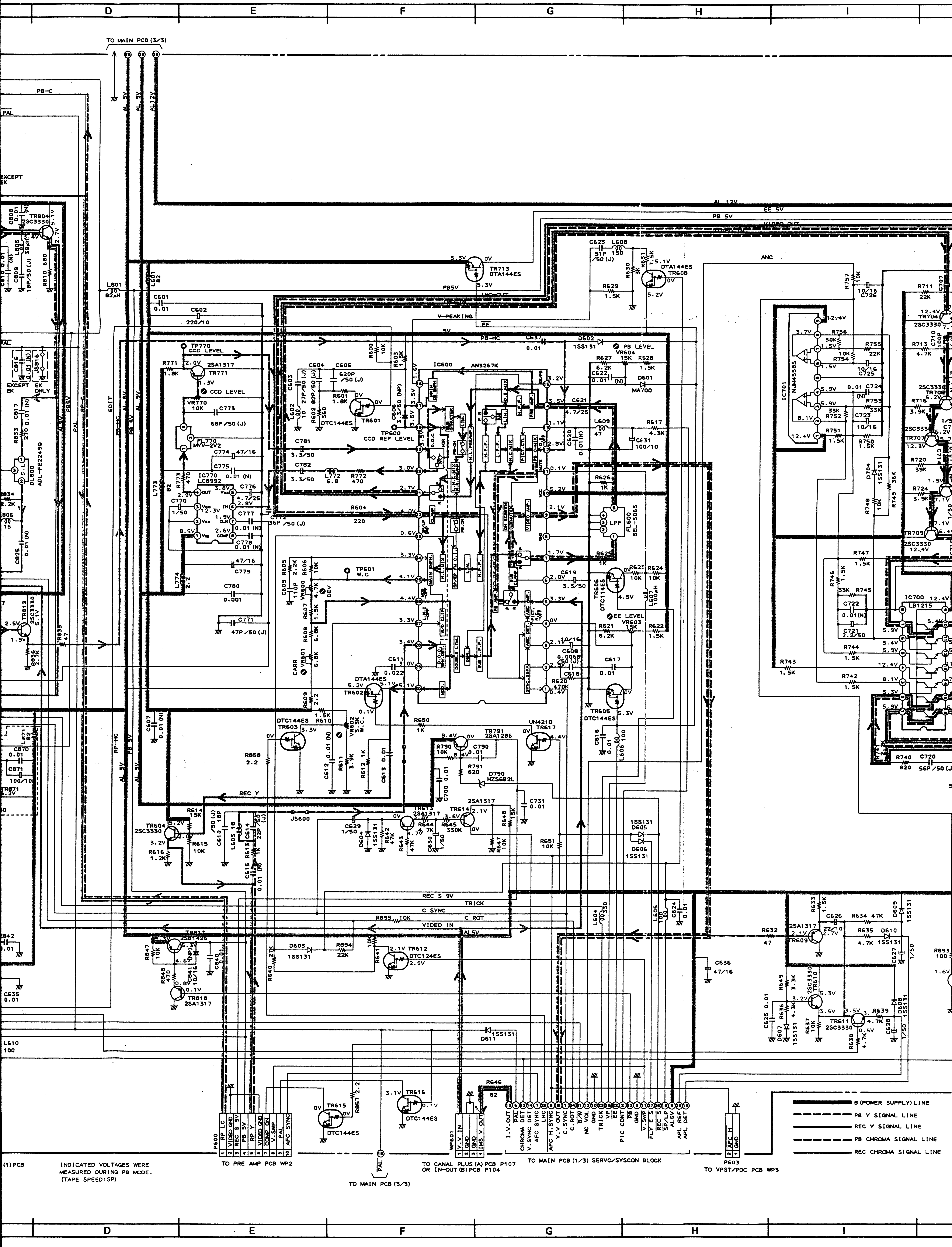
VIDEO PCB V1154A500B

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF
ALL INDUCTORS IN μH(K)

TO OPERATION (1) PCB
WP5

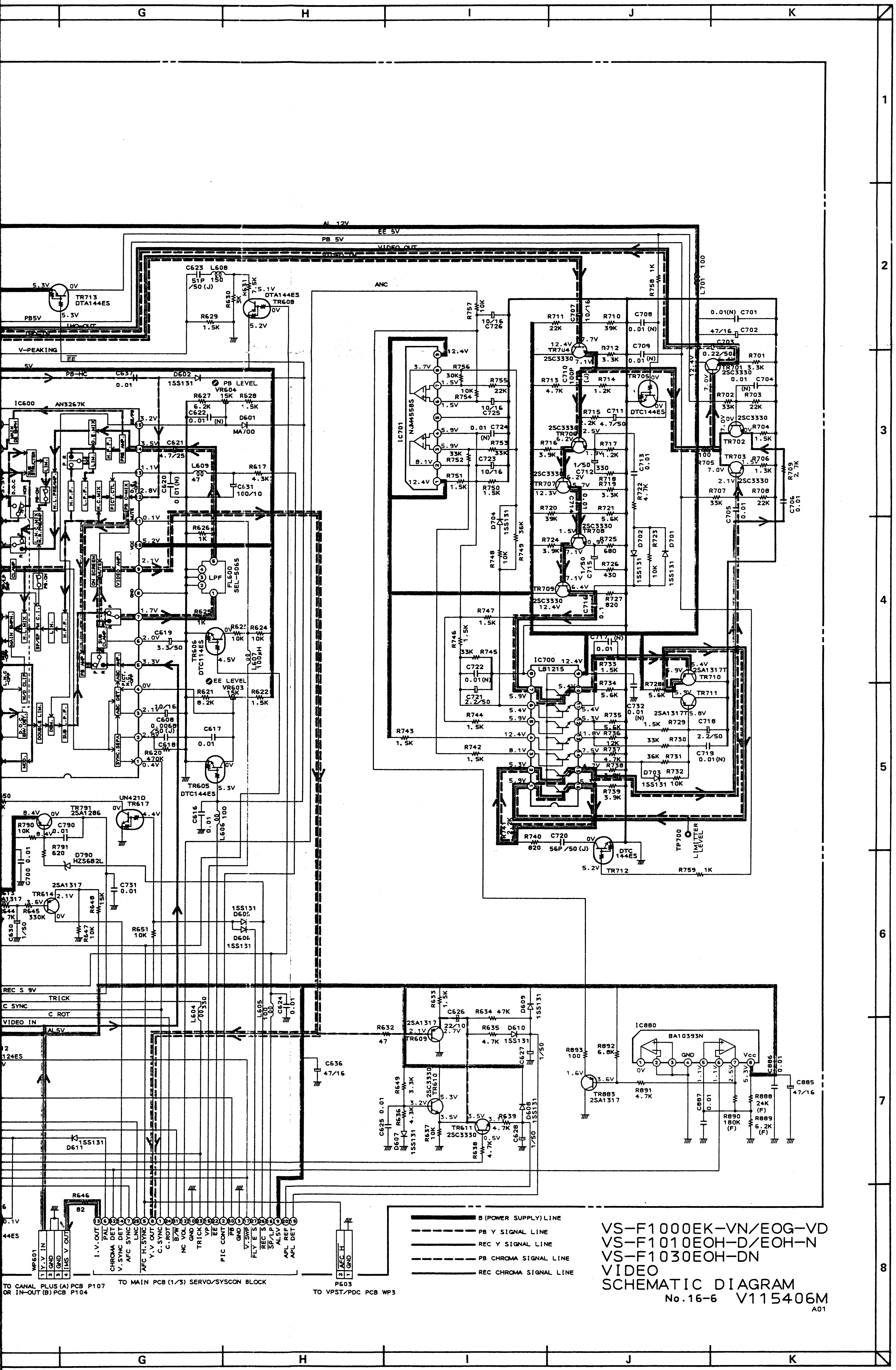
INDICATED VOLTAGES WERE
MEASURED DURING PB MODE.
(TAPE SPEED:SP)

TO PRE AMP PCB WP2

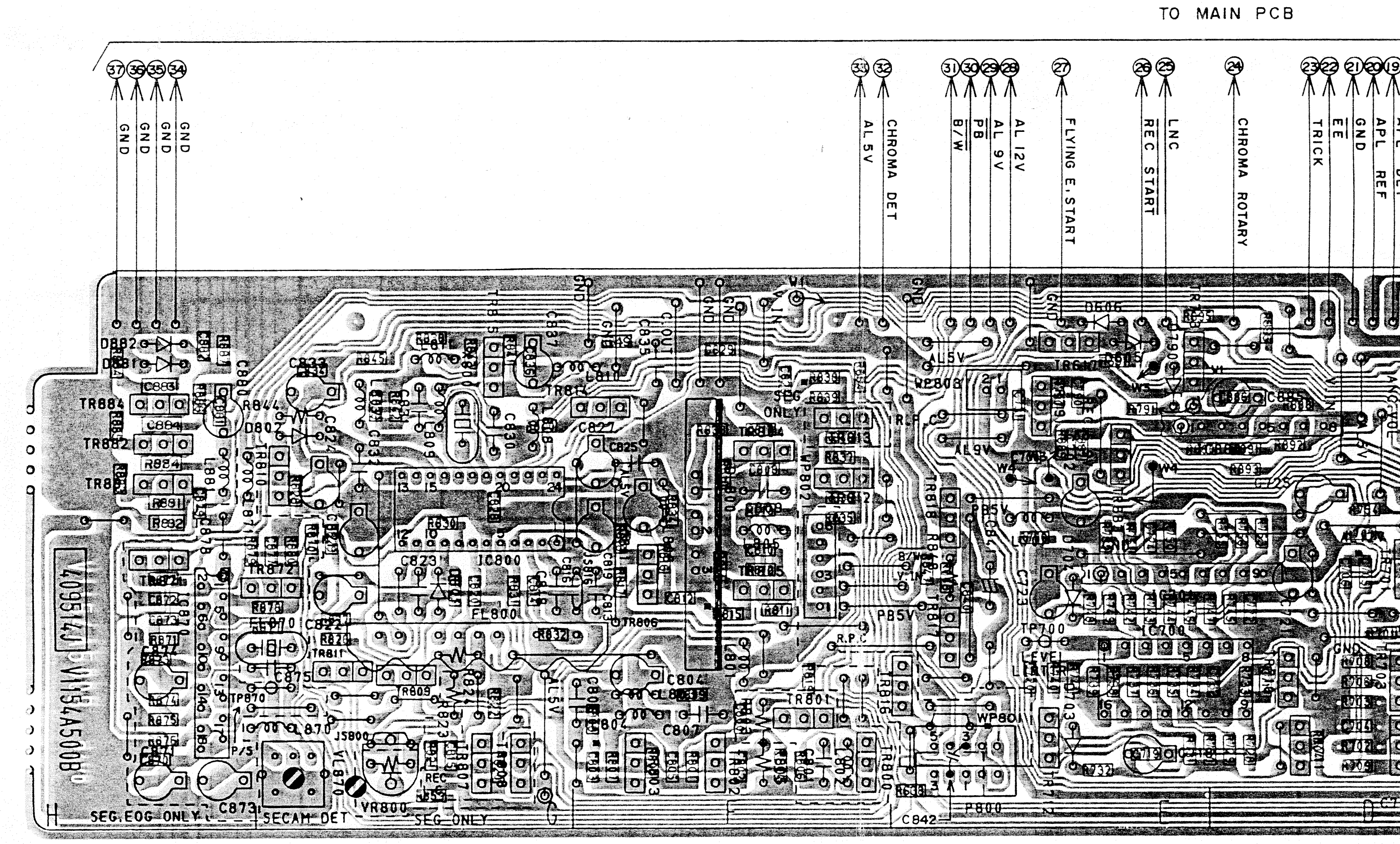

D
E
F
G
H
I
TO MAIN PCB (3/3)
AL 5V
AL 9V
AL 12V
IC600
AN3267K
IC770
LC8992
IC701
NJM4558S
IC700
LB1215
FL600
SEL-5065
LPF
FL770
MYV-2V2
DL800
ADL-FE2249Q
TR713
DTA144ES
TR608
DTA144ES
TR771
2SA1317
TR601
DTC144ES
TR602
DTA144ES
TR603
DTC144ES
TR604
2SC3330
TR605
DTC144ES
TR606
DTC114ES
TR617
UN421D
TR791
2SA1286
TR613
2SA1317
TR614
2SA1317
TR612
DTC124ES
TR615
DTC144ES
TR616
DTC144ES
TR817
2SB1425
TR818
2SA1317
TR609
2SA1317
TR610
2SC3330
TR611
2SC3330
TR804
2SC3330
TR812
2SC3330
TP770
CCD LEVEL
VR770
CCD LEVEL
TP600
CCD REF LEVEL
TP601
W.C
VR600
DEV
VR601
CARR
VR602
W.C.
VR604
PB LEVEL
VR603
EE LEVEL
JS600
D790
HZS682L
REC Y
REC S 9V
TRICK
C SYNC
C ROT
VIDEO IN
AL5V
PB 5V
EE 5V
VIDEO OUT
ANC
V-PEAKING
PB-HC
EE
5V
EDIT
RP-HC
P600
TO PRE AMP PCB WP2
WP601
TO CANAL PLUS (A) PCB P107
OR IN-OUT (B) PCB P104
TO MAIN PCB (1/3) SERVO/SYSCON BLOCK
P603
TO VPST/PDC PCB WP3
PAL
TO MAIN PCB (3/3)
B (POWER SUPPLY) LINE
PB Y SIGNAL LINE
REC Y SIGNAL LINE
PB CHROMA SIGNAL LINE
REC CHROMA SIGNAL LINE

(1) PCB

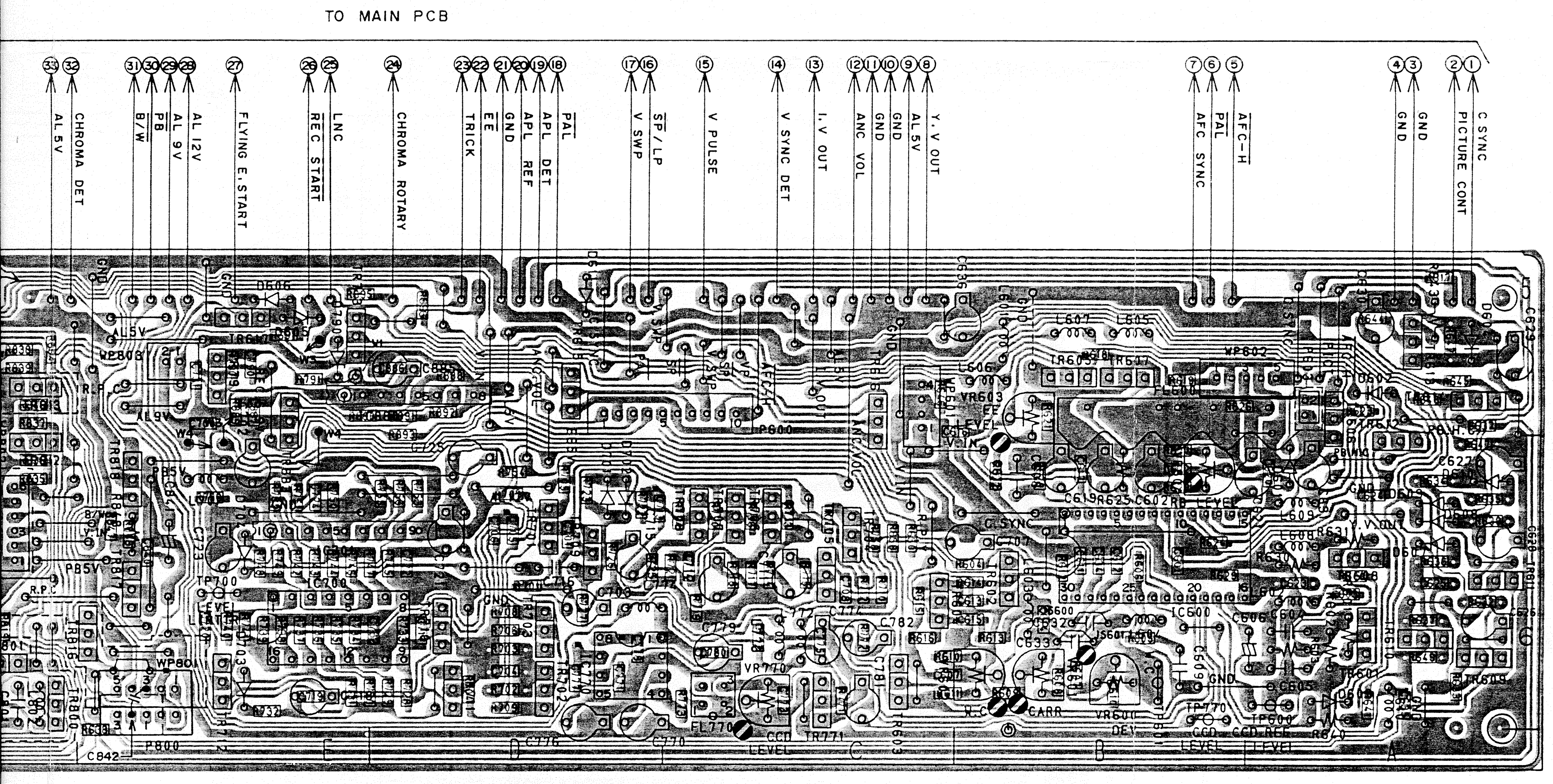
INDICATED VOLTAGES WERE
MEASURED DURING PB MODE.
(TAPE SPEED:SP)


G
H
I
J
K
1
2
3
4
5
6
7
8
AL 12V
PB 5V
EE 5V
VIDEO OUT
ANC
PB5V
V-PEAKING
EE
5V
PB HC
IC600 AN3267K
IC701 NJM4558S
IC700 LB1215
IC880 BA10393N
FL600 SEL-5065
LPF
PB LEVEL VR604 15K
EE LEVEL VR603 15K
TR713 DTA144ES
TR608 DTA144ES
TR606 DTC114ES
TR605 DTC144ES
TR791 2SA1286
TR617 UN421D
TR614 2SA1317
TR704 2SC3330
TR705 DTC144ES
TR706 2SC3330
TR707 2SC3330
TR708 2SC3330
TR709 2SC3330
TR701 2SC3330
TR702 2SC3330
TR703 2SC3330
TR710 2SA1317
TR711 2SA1317
TR712 DTC144ES
TR609 2SA1317
TR610 2SC3330
TR611 2SC3330
TR883 2SA1317
D602 1SS131
D601 MA700
D790 HZS682L
D605 1SS131
D606 1SS131
D611 1SS131
D704 1SS131
D702 1SS131
D701 1SS131
D703 1SS131
D607 1SS131
D608 1SS131
D609 1SS131
D610 1SS131
TP700 LIMITTER LEVEL
REC S 9V
TRICK
C SYNC
C ROT
VIDEO IN
AL5V
I.V.OUT
PAL
CHROMA DET
V.SYNC DET
AFC SYNC
LINE
AFC H.SYNC
Y.V OUT
C.SYNC
C.ROT
B/W
NC
VOL
GND
TRICK
VP
EE
PIC CONT
PB
GND
V.SWP
FLY E
REC
SP/LP
AL5V
APL REF
APL DET
WP601
Y.V IN
GND
GND
MS V OUT
TO CANAL PLUS (A) PCB P107
OR IN-OUT (B) PCB P104
TO MAIN PCB (1/3) SERVO/SYSCON BLOCK
P603
AFC H
GND
TO VPST/PDC PCB WP3
B (POWER SUPPLY) LINE
PB Y SIGNAL LINE
REC Y SIGNAL LINE
PB CHROMA SIGNAL LINE
REC CHROMA SIGNAL LINE

VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
VIDEO
SCHEMATIC DIAGRAM
No.16-6 V115406M
A01

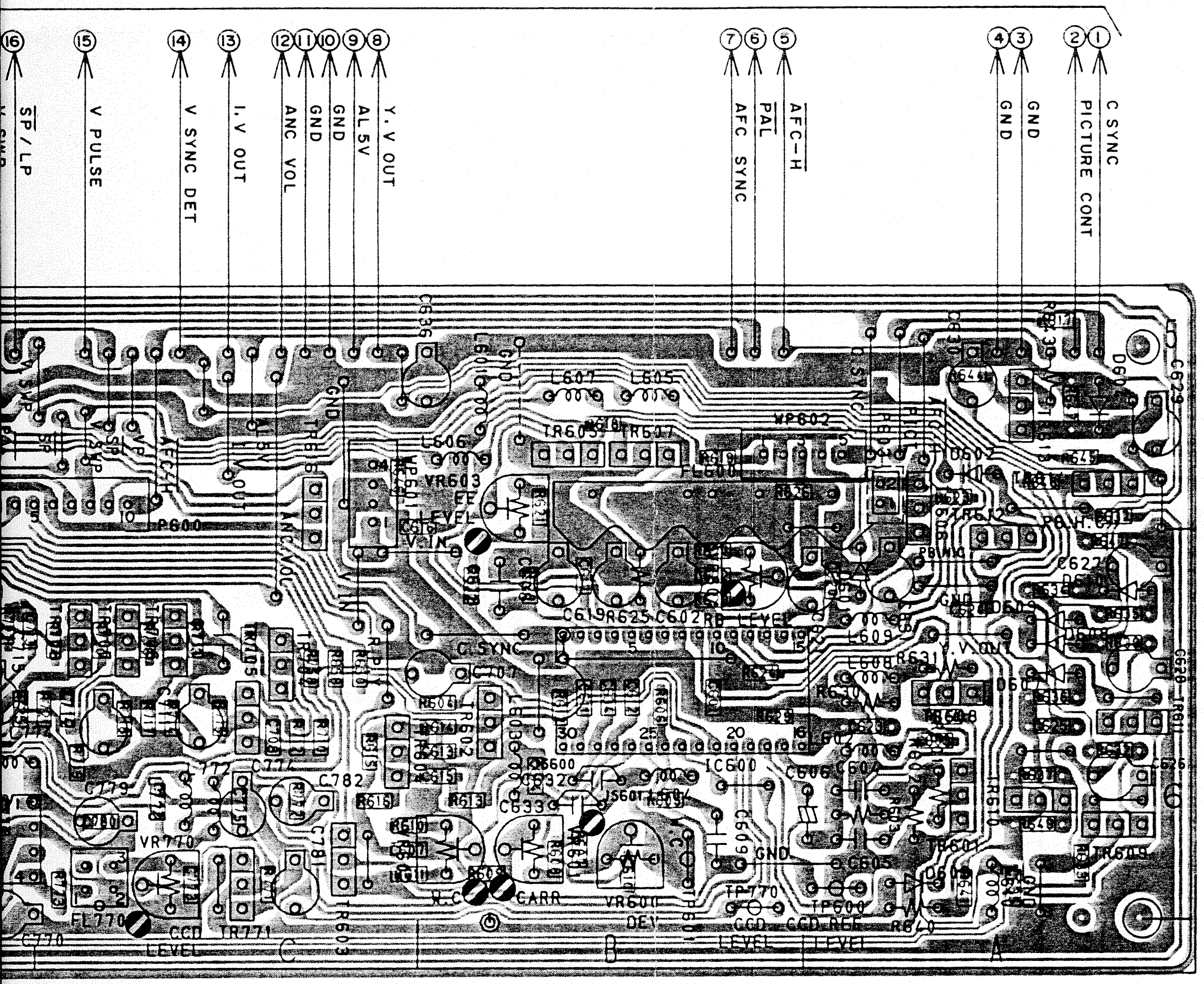

TO MAIN PCB
37 GND
36 GND
35 GND
34 GND
33 AL 5V
32 CHROMA DET
31 B/W
30 PB
29 AL 9V
28 AL 12V
27 FLYING E.START
26 REC START
25 LNC
24 CHROMA ROTARY
23 TRICK
22 EE
21 GND
20 APL REF
19
IC800
IC700
FL800
FL870
VR800
VL870
TP870
TP700
P800
WP801
WP802
WP803
SEG.EOG ONLY
SECAM DET
SEG ONLY
AL5V
AL9V
PB5V
4095140
VI154A500B

VIDEO PCB VI154


TO MAIN PCB
㉝ AL 5V
㉜ CHROMA DET
㉛ B/W
㉚ PB
㉙ AL 9V
㉘ AL 12V
㉗ FLYING E.START
㉖ REC START
㉕ LNC
㉔ CHROMA ROTARY
㉓ TRICK
㉒ EE
㉑ GND
⑳ APL REF
⑲ APL DET
⑱ PAL
⑰ V SWP
⑯ SP/LP
⑮ V PULSE
⑭ V SYNC DET
⑬ I.V OUT
⑫ ANC VOL
⑪ GND
⑩ GND
⑨ AL 5V
⑧ Y.V OUT
⑦ AFC SYNC
⑥ PAL
⑤ AFC-H
④ GND
③ GND
② PICTURE CONT
① C SYNC

VIDEO PCB VI154A500B

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING
PARTS INFORMATION.


⑯ SP / LP
⑮ V PULSE
⑭ V SYNC DET
⑬ I.V OUT
⑫ ANC VOL
⑪ GND
⑩ GND
⑨ AL 5V
⑧ Y.V OUT
⑦ AFC SYNC
⑥ PAL
⑤ AFC-H
④ GND
③ GND
② PICTURE CONT
① C SYNC
P600
VR603
CLSYNC
IC600
VR770
FL770
CCD LEVEL
TR771
VR600
DEV
CARR
TP770
TP600
CCD LEVEL
CCD REF LEVEL
A
B
C

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.

PRINCIPAL PARTS LOCATION

ICs

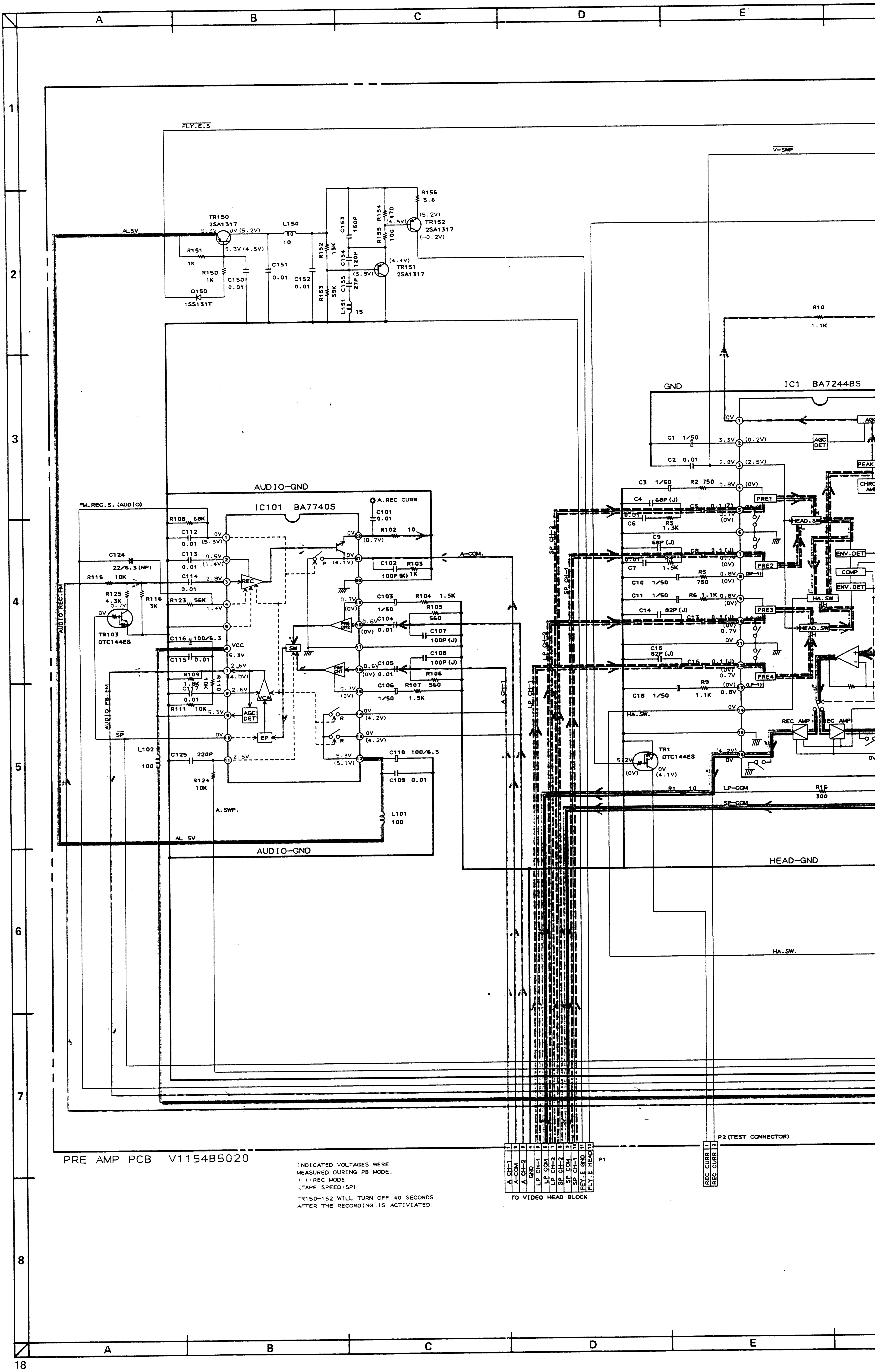
IC600	B6
IC700	D,E6
IC701	D,E6
IC770	D6
IC800	G6
IC870	H6
IC880	D,E5

CONNECTORs

P600	C,D5
P603	A5
P800,800A	E6

TRANSISTORs

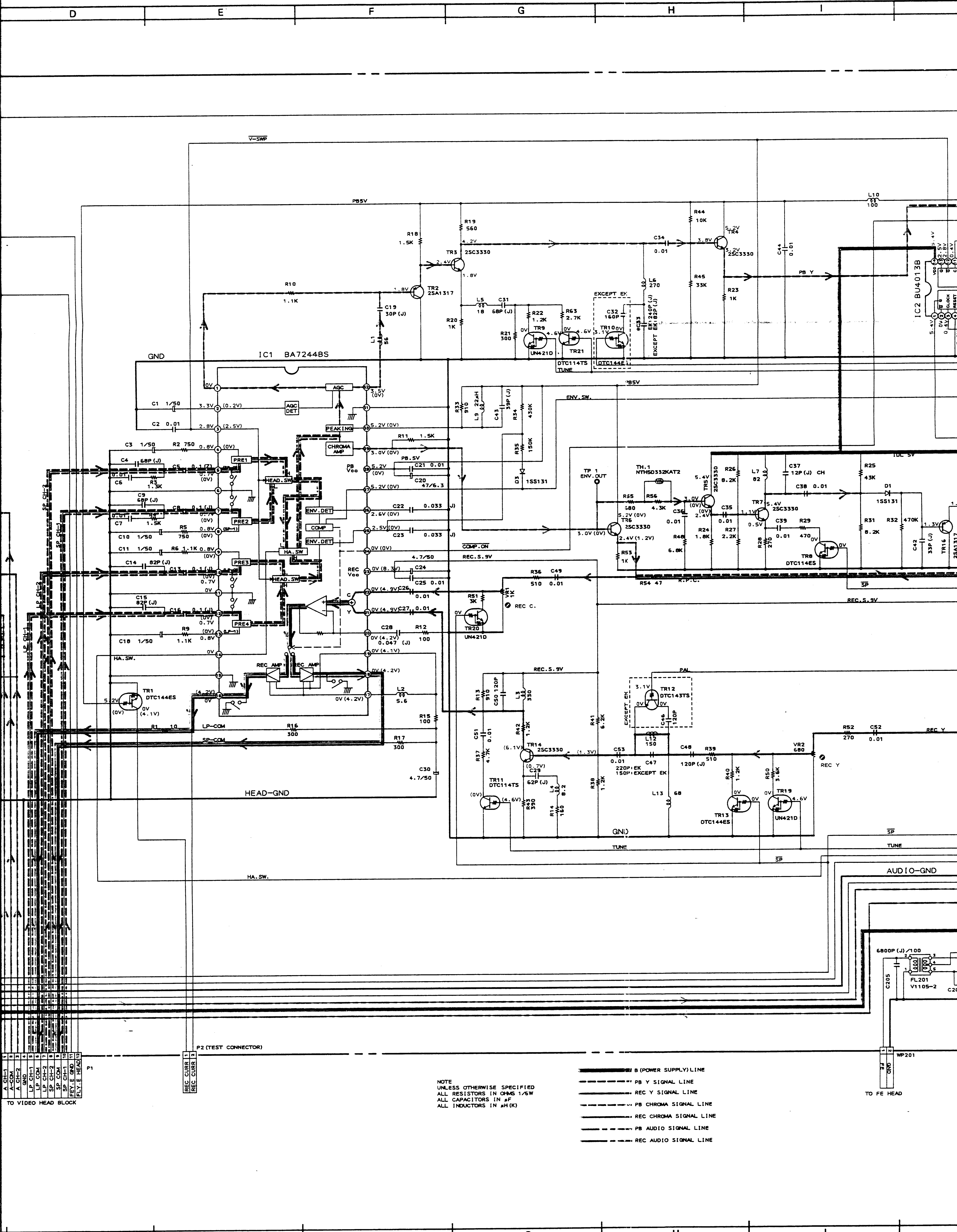
TR601	A6
TR602	B6
TR603	C6
TR604	C6
TR605	B5
TR606	A5,6
TR607	B5
TR608	A6
TR609	A6
TR610	A6
TR611	A6
TR612	A6
TR613	A5
TR614	A5
TR615	D5
TR616	C5,6
TR617	E5
TR701	D6
TR702	D6
TR703	D6
TR704	C6
TR705	C6
TR706	C6
TR707	C6
TR708	C6
TR709	D6
TR710	D6
TR711	D6
TR712	E6
TR713	E5
TR771	C6
TR791	E5
TR800	F6
TR801	F6
TR802	F6
TR803	F6
TR804	F5
TR805	F6
TR806	F6
TR807	G6
TR808	G6
TR809	G6
TR810	G5,6
TR811	G6
TR812	F6
TR813	F5
TR814	F5
TR815	G5
TR816	E6
TR817	E6
TR818	E6
TR871	H6
TR872	G6
TR881	H6
TR882	H5
TR883	E5
TR884	H5


A
B
C
D
E
1
2
3
4
5
6
7
8
FLY.E.S
V-SWP
AL5V
TR150
2SA1317
5.3V
0V (5.2V)
5.3V (4.5V)
R151
1K
R150
1K
D150
1SS131T
C150
0.01
L150
10
C151
0.01
C152
0.01
R152
13K
R153
39K
C153
150P
C154
120P
C155
27P
L151
15
R154
470
R155
100
R156
5.6
(5.2V)
(4.5V)
TR152
2SA1317
(-0.2V)
(4.4V)
(3.9V)
TR151
2SA1317
R10
1.1K
GND
IC1 BA7244BS
C1 1/50
3.3V
(0.2V)
AGC DET
C2 0.01
2.8V
(2.5V)
PEAK
C3 1/50
R2 750
0.8V
(0V)
CHRO AMP
C4
68P (J)
C5
0.1 (Z)
PRE1
HEAD.SW
0.01
R3
1.3K
C6
C9
68P (J)
C8
0.1 (J)
PRE2
ENV.DET
COMP
C7
1.5K
C10 1/50
R5
750
C11 1/50
R6 1.1K
HA.SW
C14
82P (J)
C13
0.1 (J)
PRE3
C15
82P (J)
C16
0.1 (J)
PRE4
R9
1.1K
C18 1/50
HA.SW.
REC AMP
TR1
DTC144ES
5.2V
(0V)
(4.1V)
(4.2V)
LP-COM
SP-COM
R1 10
R16
300
HEAD-GND
AUDIO-GND
IC101 BA7740S
A.REC CURR
C101
0.01
R102 10
FM.REC.S. (AUDIO)
R108 68K
C112
0.01
C113
0.01
C114
0.01
C124
22/6.3 (NP)
R115 10K
R125
4.3K
R116
3K
R123 56K
TR103
DTC144ES
AUDIO REC.FM
REC
A-COM.
C102
100P (K)
R103
1K
C103
1/50
R104 1.5K
R105
560
C104
0.01
C107
100P (J)
PRE CH1
PRE CH2
SW
C105
0.01
C108
100P (J)
R106
560
C106
1/50
R107
1.5K
C116 100/6.3
VCC
C115 0.01
R109
1.8K
R110
10K
C117
0.01
R111 10K
VCA
AGC DET
EP
AUDIO PB.FM
SP
L102
100
C125 220P
R124
10K
A.SWP.
C110 100/6.3
C109 0.01
L101
100
AL 5V
SP CH-2
SP CH-1
LP CH-2
LP CH-1
A CH-1
A CH-1
A-COM
A CH-2
GND
LP CH-1
LP COM
LP CH-2
SP CH-2
SP COM
SP CH-1
FEY.E GND
FLY.E HEAD
P1
TO VIDEO HEAD BLOCK
P2 (TEST CONNECTOR)
REC CURR 1
REC CURR 2

PRE AMP PCB V1154B5020

INDICATED VOLTAGES WERE MEASURED DURING PB MODE.
( ) : REC MODE
(TAPE SPEED : SP)

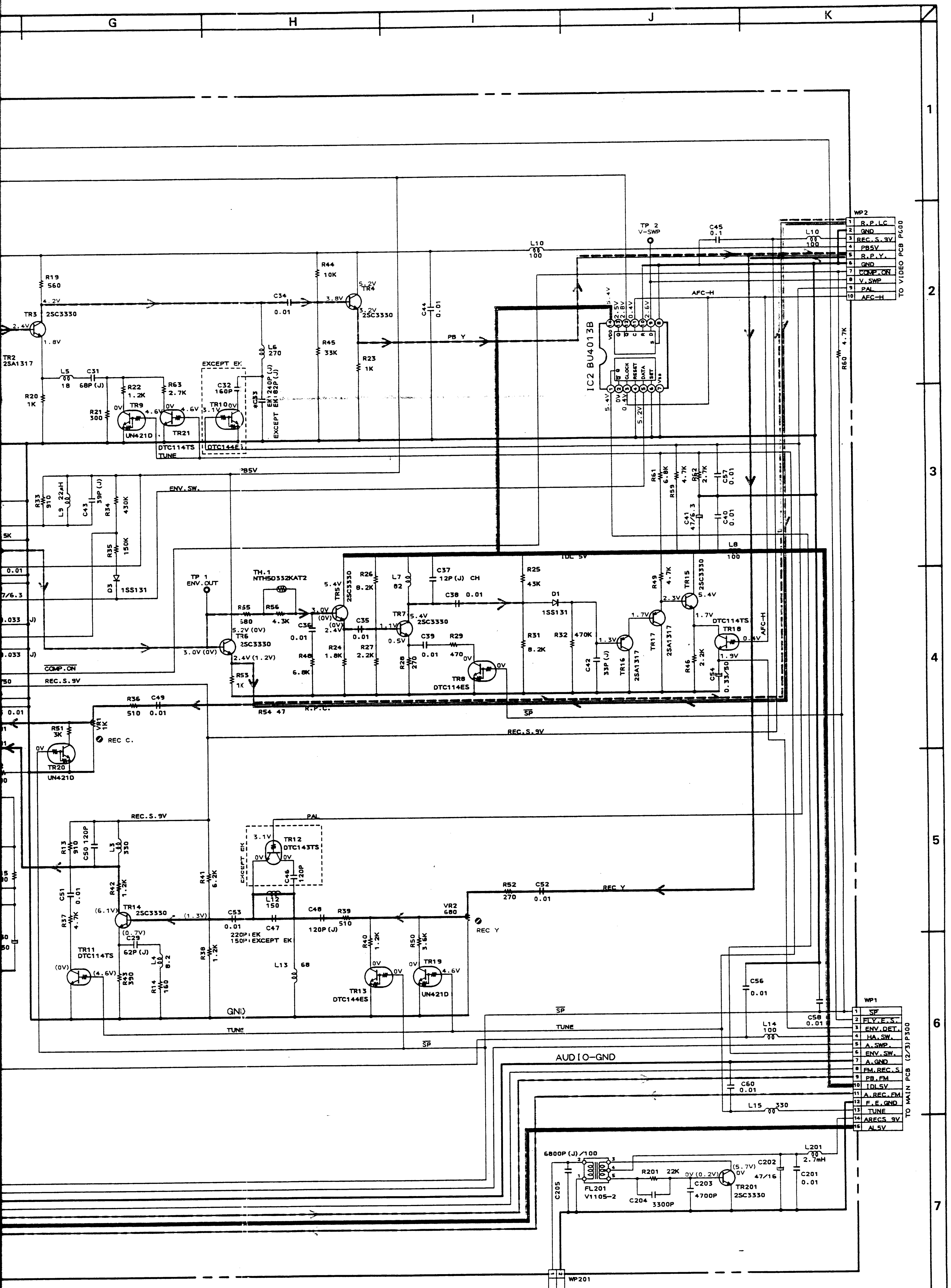
TR150~152 WILL TURN OFF 40 SECONDS AFTER THE RECORDING IS ACTIVIATED.



D
E
F
G
H
I
V-SWP
PB5V
GND
IC1 BA7244BS
AGC
AGC DET
PEAKING
CHROMA AMP
PRE1
PRE2
PRE3
PRE4
HEAD.SW
HA.SW
ENV.DET
COMP
REC AMP
PB Vcc
REC Vcc
TR1 DTC144ES
TR2 2SA1317
TR3 2SC3330
TR4 2SC3330
TR5 2SC3330
TR6 2SC3330
TR7 2SC3330
TR8 DTC114ES
TR9 UN421D
TR10 DTC144E
TR11 DTC114TS
TR12 DTC143TS
TR13 DTC144ES
TR14 2SC3330
TR16 2SA1317
TR19 UN421D
TR20 UN421D
TR21 DTC114TS
EXCEPT EK
TP 1 ENV. OUT
TH.1 NTH5D332KAT2
D1 1SS131
D3 1SS131
VR1 1K REC C.
VR2 680 REC Y
IC2 BU4013B
L10 100
ENV.SW.
COMP.ON
REC.S.9V
R.P.C.
PB Y
REC Y
PAL
SP
TUNE
AUDIO-GND
HEAD-GND
LP-COM
SP-COM
HA.SW.
6800P (J)/100
FL201 V1105-2
C205
WP201
FE
GND
TO FE HEAD
P2 (TEST CONNECTOR)
REC CURR 1
REC CURR 2
P1
A CH-1
A-COM
A CH-2
GND
LP CH-1
LP COM
LP CH-2
SP CH-2
SP COM
SP CH-1
FEY.E GND
FLY.E HEAD
TO VIDEO HEAD BLOCK

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W
ALL CAPACITORS IN µF
ALL INDUCTORS IN µH (K)

B (POWER SUPPLY) LINE
PB Y SIGNAL LINE
REC Y SIGNAL LINE
PB CHROMA SIGNAL LINE
REC CHROMA SIGNAL LINE
PB AUDIO SIGNAL LINE
REC AUDIO SIGNAL LINE


G
H
I
J
K
1
2
3
4
5
6
7
8
WP2
1 R.P.LC
2 GND
3 REC.S.9V
4 PB5V
5 R.P.Y.
6 GND
7 COMP.ON
8 V.SWP
9 PAL
10 AFC-H
TO VIDEO PCB P600
TP 2 V-SWP
C45 0.1
L10 100
AFC-H
IC2 BU4013B
VDD
CLOCK
RESET
DATA
SET
Vss
R60 4.7K
R19 560
TR3 2SC3330
TR2 2SA1317
R44 10K
R45 33K
TR4 2SC3330
R23 1K
C34 0.01
C44 0.01
PB Y
L6 270
L5 18
C31 68P (J)
R22 1.2K
R63 2.7K
R20 1K
R21 300
TR9 UN421D
TR21 DTC114TS
EXCEPT EK
C32 160P
TR10 DTC144ES
C33 EK 240P (J) EXCEPT EK 182P (J)
TUNE
PB5V
ENV.SW.
R33 910
L9 22µH
C43 39P (J)
R34 430K
R35 150K
D3 1SS131
R61 6.8K
R59 4.7K
R62 2.7K
C57 0.01
C41 47/6.3
C40 0.01
L8 100
IDL 5V
TP 1 ENV.OUT
TH.1 NTH5D332KAT2
R55 580
R56 4.3K
TR5 2SC3330
R26 8.2K
L7 82
C37 12P (J) CH
C38 0.01
R25 43K
D1 1SS131
R49 4.7K
TR15 2SC3330
C36 0.01
C35 0.01
TR7 2SC3330
C39 0.01
R29 470
R48 6.8K
R24 1.8K
R27 2.2K
R28 270
TR8 DTC114ES
R31 8.2K
R32 470K
C42 33P (J)
TR16 2SA1317
TR17 2SA1317
R46 2.2K
C54 0.33/50
TR18 DTC114TS
TR6 2SC3330
R53 1K
COMP.ON
REC.S.9V
R36 510
C49 0.01
R54 47
R.P.C.
SP
VR1 1K
REC C.
R51 3K
TR20 UN421D
REC.S.9V
PAL
R13 910
C50 120P
L3 330
TR12 DTC143TS
C46 120P
EXCEPT EK
R41 6.2K
R52 270
C52 0.01
REC Y
C51 0.01
R42 1.2K
L12 150
R37 4.7K
TR14 2SC3330
C53 0.01
C47 220P EK 150P EXCEPT EK
C48 120P (J)
R39 510
VR2 680
REC Y
C29 62P (J)
L4 8.2
TR11 DTC114TS
R43 390
R14 160
R38 1.2K
L13 68
R40 1.2K
R50 3.6K
TR13 DTC144ES
TR19 UN421D
GND
SP
TUNE
AUDIO-GND
C56 0.01
C58 0.01
L14 100
C60 0.01
L15 330
WP1
1 SP
2 FLY.E.S.
3 ENV.DET.
4 HA.SW.
5 A.SWP.
6 ENV.SW.
7 A.GND
8 FM.REC.S
9 PB.FM
10 IDL5V
11 A.REC.FM
12 F.E.GND
13 TUNE
14 ARECS 9V
15 AL5V
TO MAIN PCB (2/3) P300
6800P (J)/100
FL201 V1105-2
C205
R201 22K
C203 4700P
C204 3300P
TR201 2SC3330
C202 47/16
L201 2.7mH
C201 0.01
WP201
1 FE
2 GND
TO FE HEAD

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W
ALL CAPACITORS IN µF
ALL INDUCTORS IN µH(K)

B (POWER SUPPLY) LINE
PB Y SIGNAL LINE
REC Y SIGNAL LINE
PB CHROMA SIGNAL LINE
REC CHROMA SIGNAL LINE
PB AUDIO SIGNAL LINE
REC AUDIO SIGNAL LINE

VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
PRE AMP
SCHEMATIC DIAGRAM
No.16-7 V115407M
A0

G H I J K

PRINCIPAL PARTS LOCATION

ICs

IC1	B,C1
IC2	D1
IC101	A1

CONNECTORs

P1	B1
P2	B1

WPs

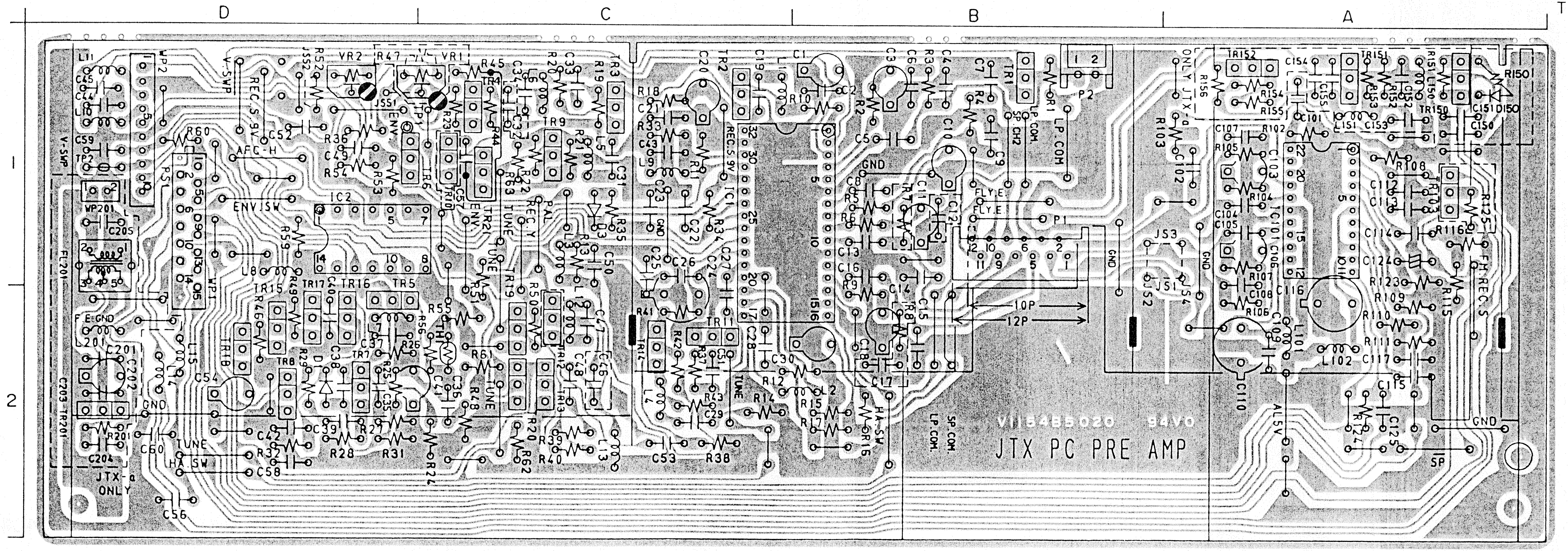
WP1	D1
WP2	D1
WP201	D1

TPs

TP1	D1
TP2	D1

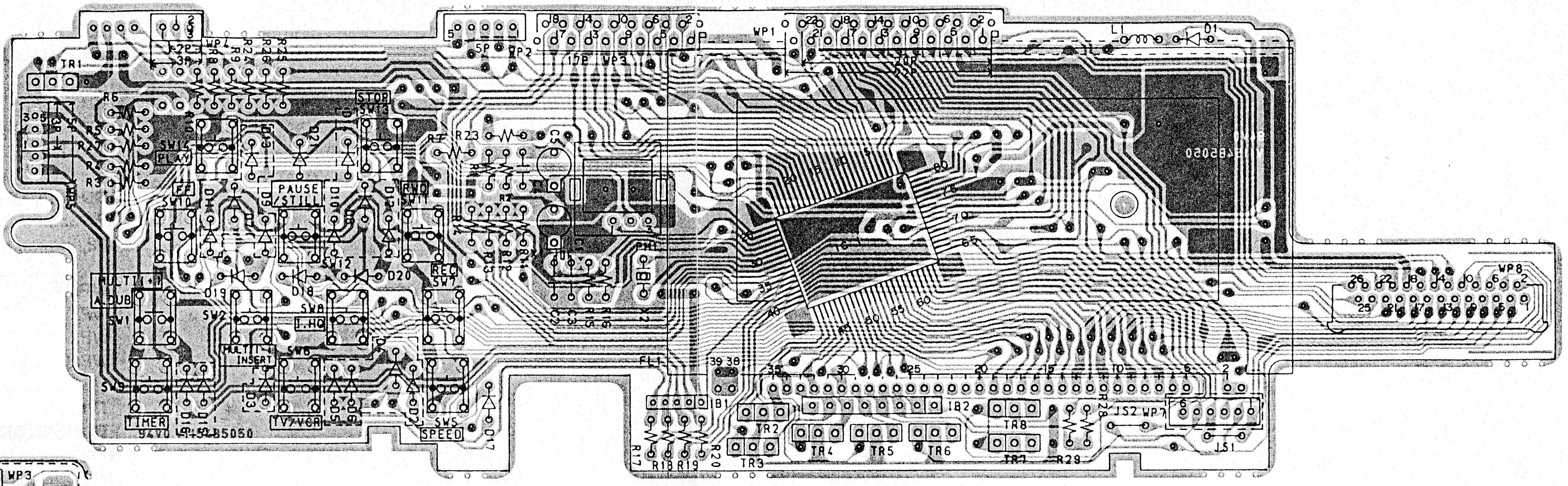
TRANSISTORs

TR1	B1
TR2	C1
TR3	C1
TR4	C1
TR5	D2
TR6	D1
TR7	D2
TR8	D2
TR9	C1
TR10	C1
TR11	C2
TR12	C2
TR13	C2
TR14	C2
TR15	D2
TR16	D2
TR17	D2
TR18	D2
TR19	C2
TR20	C2
TR21	C1
TR103	A1
TR150	A1
TR151	A1
TR152	A1
TR201	D2

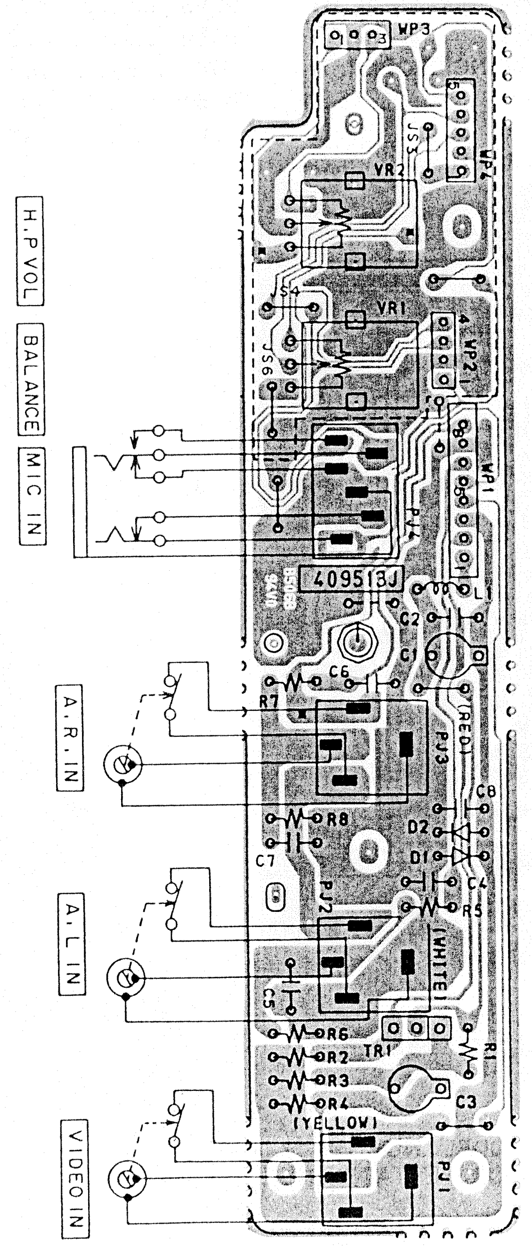

D
C
B
A
1
2
V1154B5020 94V0
JTX PC PRE AMP
IC1
IC2
IC101
P1
P2
WP1
WP2
WP201
TP1
TP2
VR1
VR2
GND
10P
12P
JTX-a ONLY
ONLY JTX
FLY.E
LP.COM
SP.COM
HA.SW
TUNE
AFC-H
ENV.SW
REC.S
V-SW
AL5V
SP

PRE AMP PCB V1154B5020

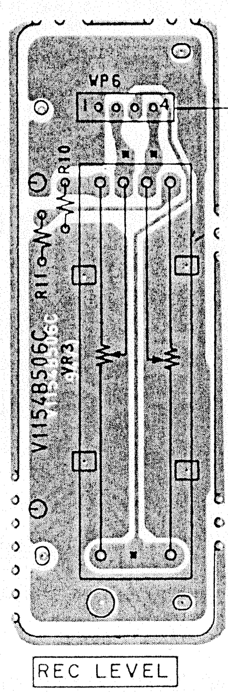
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.


TR1
WP1
WP2
WP3
WP7
WP8
SW1
SW2
SW3
SW5
SW6
SW7
SW8
SW9
SW10
SW11
SW12
SW13
SW14
PLAY
STOP
FF
PAUSE/STILL
REW
REC
MULTI+1 A.DUB
T.HQ
MULTI INSERT
TIMER
TV/VCR
SPEED
D17
D18
D19
D20
L1
D1
FL1
IB1
IB2
TR2
TR3
TR4
TR5
TR6
TR7
TR8
R17
R18
R19
R20
R28
R29
JS1
JS2
R23
94V0
V1154B5050

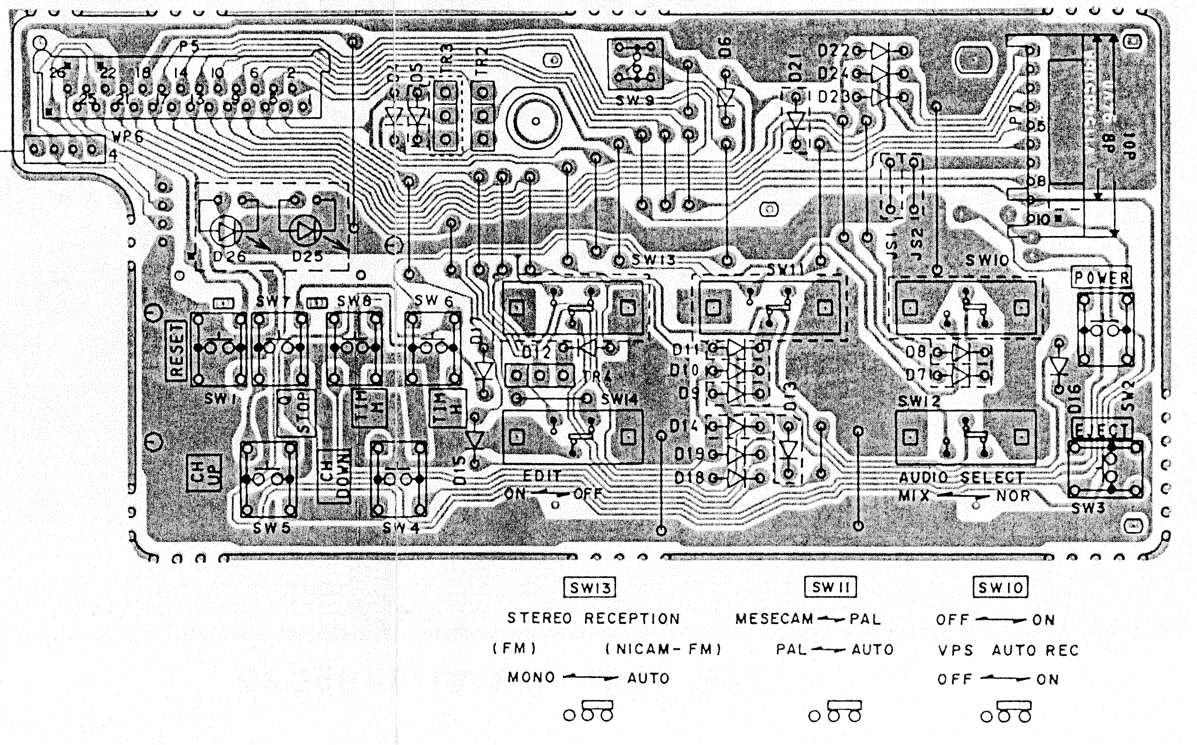
OPERATION (1) PCB V1154B5050


H.P VOL
BALANCE
MIC IN
A.R. IN
A.L. IN
VIDEO IN
WP1
WP2
WP3
JS3
VR1
VR2
S4
S6
PJ4
409513J
C1
C2
C3
C4
C5
C6
C7
C8
R1
R2
R3
R4
R5
R6
R7
R8
D1
D2
PJ1
PJ2
PJ3
TR1
(RED)
(WHITE)
(YELLOW)

FRONT PCB V1154B506B


WP6
R10
R11
VR3
V1154B506C
REC LEVEL

VR PCB V1154B506C

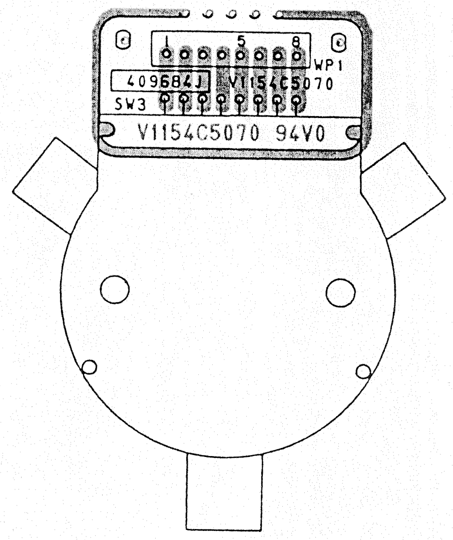

P5
WP6
TR3
TR2
D5
D6
D21
D22
D23
D24
SW9
D25
D26
SW13
SW11
SW10
JS1
JS2
POWER
RESET
SW1
SW4
SW5
SW6
SW7
SW8
SW12
SW14
STOP
CH UP
CH DOWN
TIM
D7
D8
D9
D10
D11
D12
D13
D14
D15
D16
D18
D19
TR4
EDIT
ON — OFF
AUDIO SELECT
MIX — NOR
EJECT
SW3
SW2
8P
10P
P10

SW13
STEREO RECEPTION
(FM) (NICAM-FM)
MONO ← AUTO

SW11
MESECAM ← PAL
PAL ← AUTO

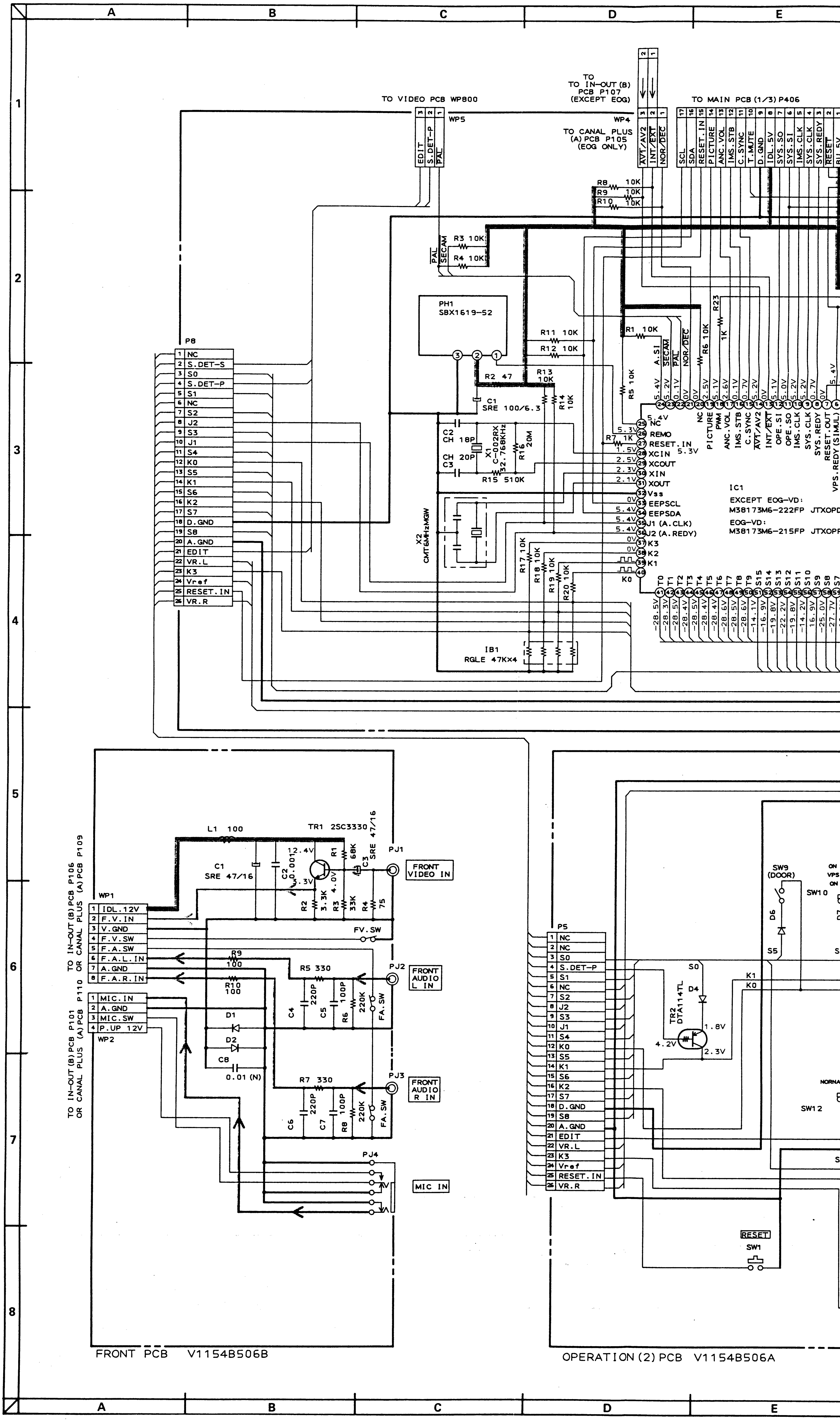
SW10
OFF → ON
VPS AUTO REC
OFF → ON

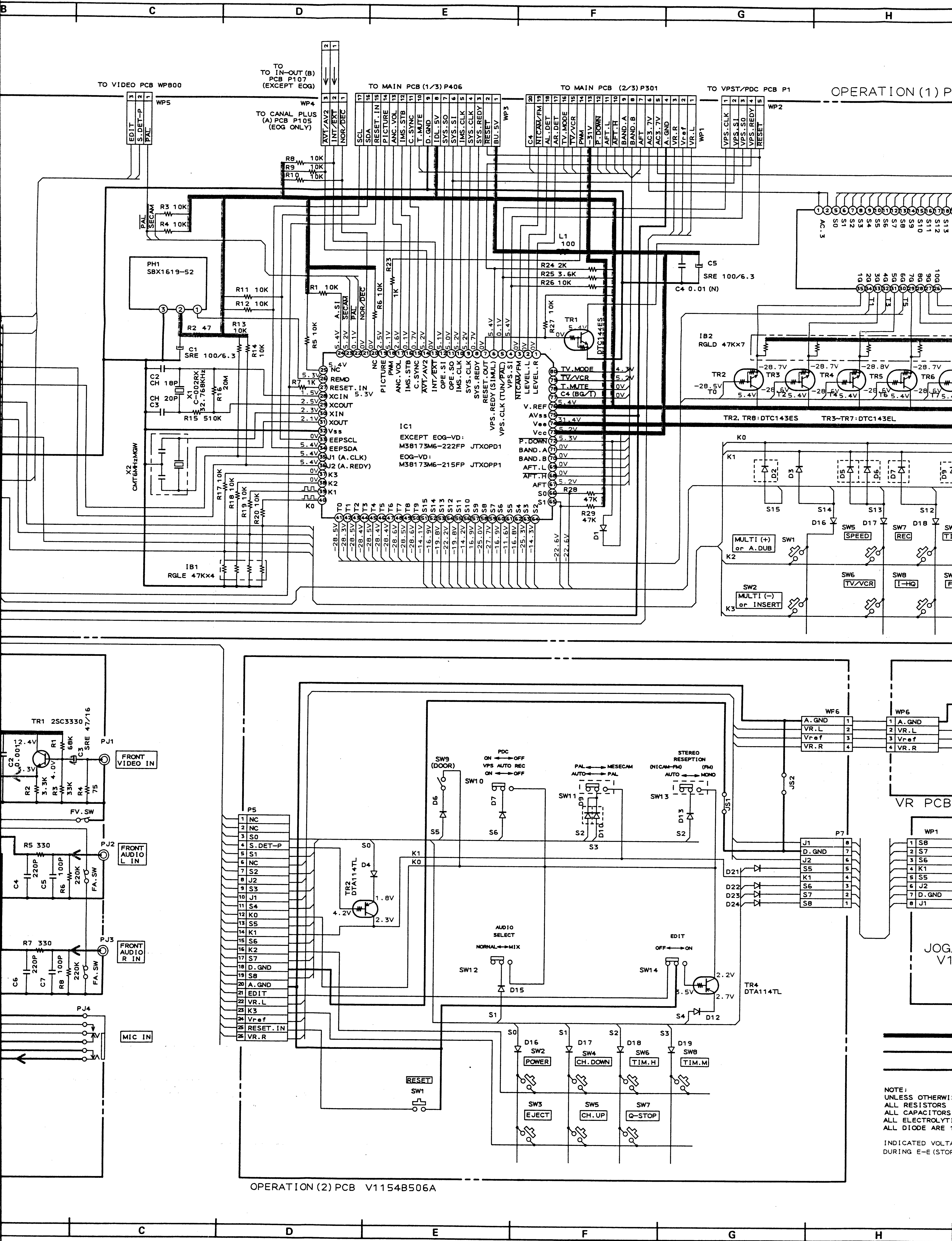
OPERATION (2) PCB V1154B506A

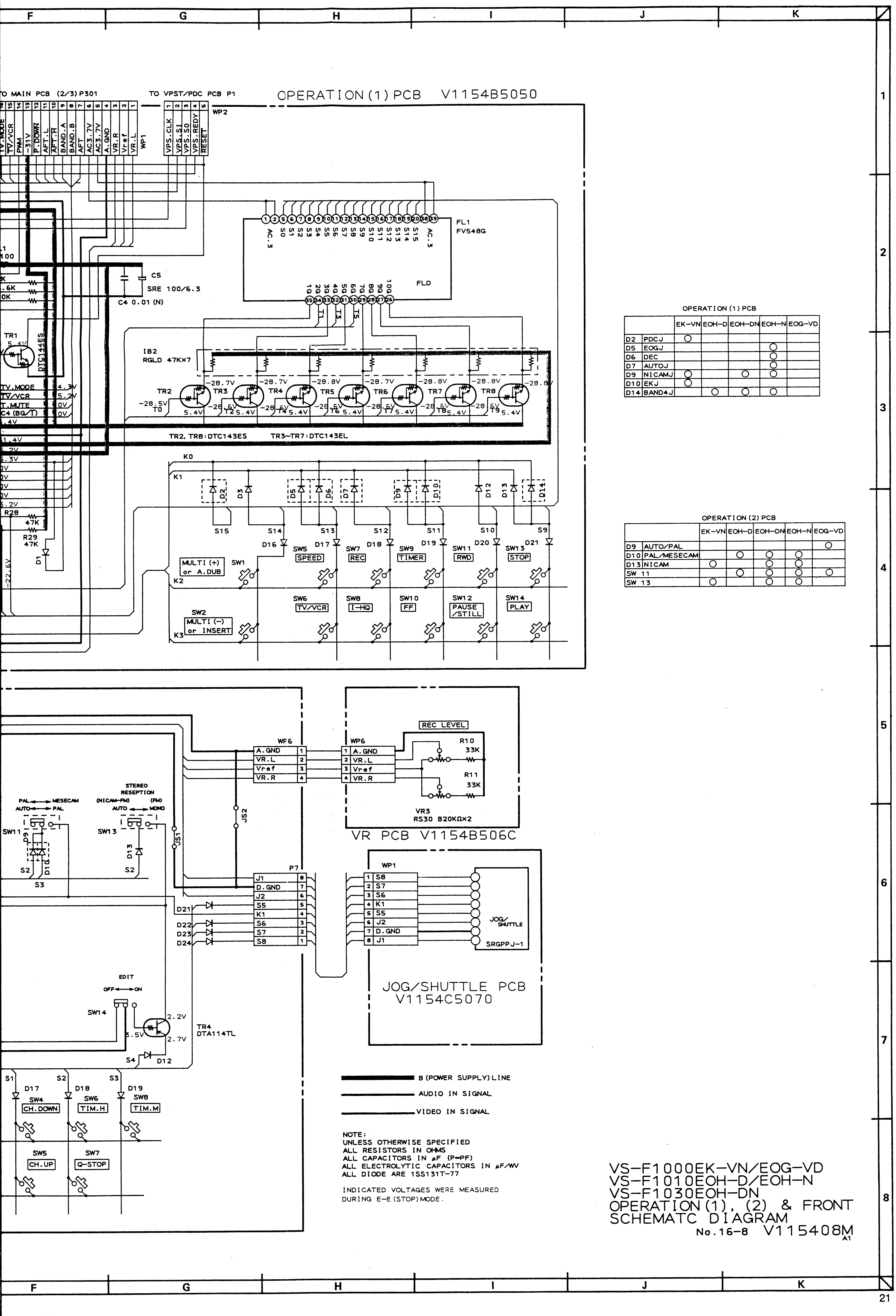

WP1
SW3
409684J
V1154C5070
V1154C5070 94V0

JOG / SHUTTLE PCB V1154C5070

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING
PARTS INFORMATION.


A
B
C
D
E
1
2
3
4
5
6
7
8
TO VIDEO PCB WP800
WP5
EDIT
S.DET-P
PAL
TO IN-OUT (B) PCB P107 (EXCEPT EOG)
TO CANAL PLUS (A) PCB P105 (EOG ONLY)
WP4
AVT/AV2
INT/EXT
NOR/DEC
TO MAIN PCB (1/3) P406
SCL
SDA
RESET.IN
PICTURE
ANC.VOL
IMS.STB
C.SYNC
T.MUTE
D.GND
IDL.5V
SYS.SI
SYS.SO
SYS.CLK
SYS.REDY
RESET
R8 10K
R9 10K
R10 10K
R3 10K
R4 10K
PAL
SECAM
PH1
SBX1619-52
R11 10K
R12 10K
R13 10K
R14 10K
R2 47
C1 SRE 100/6.3
C2 CH 18P
CH 20P C3
X1 C-002RX 32.768KHz
R16 20M
R15 510K
X2 CMT6MHzMGW
R17 10K
R18 10K
R19 10K
R20 10K
IB1 RGLE 47K×4
R1 10K
R5 10K
R6 10K
R7 1K
R23 1K
A.SI
NOR/DEC
P8
NC
S.DET-S
S0
S.DET-P
S1
NC
S2
J2
S3
J1
S4
K0
S5
K1
S6
K2
S7
D.GND
S8
A.GND
EDIT
VR.L
K3
Vref
RESET.IN
VR.R
NC
REMO
RESET.IN
XCIN
XCOUT
XIN
XOUT
Vss
EEPSCL
EEPSDA
J1 (A.CLK)
J2 (A.REDY)
K3
K2
K1
K0
PICTURE
PWM
ANC.VOL
IMS.STB
C.SYNC
AVT/AV2
INT/EXT
OPE.SI
OPE.SO
IMS.CLK
SYS.CLK
SYS.REDY
RESET.OUT
VPS.REDY (SIMUL)
IC1
EXCEPT EOG-VD:
M38173M6-222FP JTXOPD
EOG-VD:
M38173M6-215FP JTXOPF
T0 T1 T2 T3 T4 T5 T6 T7 T8 T9 S15 S14 S13 S12 S11 S10 S9 S8 S7
TO IN-OUT (B) PCB P106 OR CANAL PLUS (A) PCB P109
WP1
IDL.12V
F.V.IN
V.GND
F.V.SW
F.A.SW
F.A.L.IN
A.GND
F.A.R.IN
TO IN-OUT (B) PCB P101 OR CANAL PLUS (A) PCB P110
MIC.IN
A.GND
MIC.SW
P.UP 12V
WP2
L1 100
TR1 2SC3330
C1 SRE 47/16
C2 0.001
R1 68K
C3 SRE 47/16
R2 3.3K
R3 33K
R4 75
12.4V
3.3V
4.0V
PJ1
FRONT VIDEO IN
FV.SW
R9 100
R10 100
R5 330
PJ2
FRONT AUDIO L IN
C4 220P
C5 100P
R6 220K
FA.SW
D1
D2
C8 0.01 (N)
R7 330
PJ3
FRONT AUDIO R IN
C6 220P
C7 100P
R8 220K
FA.SW
PJ4
MIC IN
FRONT PCB V1154B506B
P5
NC
NC
S0
S.DET-P
S1
NC
S2
J2
S3
J1
S4
K0
S5
K1
S6
K2
S7
D.GND
S8
A.GND
EDIT
VR.L
K3
Vref
RESET.IN
VR.R
SW9 (DOOR)
SW10
D6
S5
S0
D4
TR2 DTA114TL
1.8V
4.2V
2.3V
K1
K0
SW12
RESET
SW1
OPERATION (2) PCB V1154B506A


B
C
D
E
F
G
H
TO VIDEO PCB WP800
WP5
EDIT
S.DET-P
PAL
TO IN-OUT (B) PCB P107 (EXCEPT EOG)
TO CANAL PLUS (A) PCB P105 (EOG ONLY)
WP4
AVT/AV2
INT/EXT
NOR/DEC
TO MAIN PCB (1/3) P406
SCL
SDA
RESET.IN
PICTURE
ANC.VOL
IMS.STB
C.SYNC
T.MUTE
D.GND
IDL.5V
SYS.SO
SYS.SI
IMS.CLK
SYS.CLK
SYS.REDY
RESET
BU.5V
WP3
TO MAIN PCB (2/3) P301
C4
NTCAM/FM
AL.DET
AR.DET
TV.MODE
TV/VCR
PWM
-31V
P.DOWN
AFT.L
AFT.H
BAND.A
BAND.B
AFT
AC3.7V
AC3.7V
A.GND
VR.R
Vref
VR.L
WP1
TO VPST/PDC PCB P1
VPS.CLK
VPS.SI
VPS.SO
VPS.REDY
RESET
WP2
OPERATION(1) P
R8 10K
R9 10K
R10 10K
R3 10K
R4 10K
PAL
SECAM
PH1 SBX1619-52
R11 10K
R12 10K
R2 47
R13 10K
R14 10K
C1 SRE 100/6.3
C2 CH 18P
CH 20P C3
X1 C-002RX 32.768KHz
R16 20M
R15 510K
X2 CMT6MHzMGW
R17 10K
R18 10K
R19 10K
R20 10K
IB1 RGLE 47K×4
R1 10K
R5 10K
R6 10K
R23 1K
R7 1K
A.SI
SECAM
PAL
NOR/DEC
L1 100
R24 2K
R25 3.6K
R26 10K
C5 SRE 100/6.3
C4 0.01 (N)
R27 10K
TR1 DTC144ES
R28 47K
R29 47K
D1
IC1
EXCEPT EOG-VD: M38173M6-222FP JTXOPD1
EOG-VD: M38173M6-215FP JTXOPP1
NC
REMO
RESET.IN
XCIN
XCOUT
XIN
XOUT
Vss
EEPSCL
EEPSDA
J1 (A.CLK)
J2 (A.REDY)
K3
K2
K1
K0
PICTURE
PWM
ANC.VOL
IMS.STB
C.SYNC
AVT/AV2
INT/EXT
IDL.5V
OPE.SI
OPE.SO
IMS.CLK
SYS.CLK
SYS.REDY
RESET.OUT
VPS.REDY (SIMUL)
VPS.CLK (TUN/PAL)
VPS.SI
NTCAM/FM
LEVEL.L
LEVEL.R
TV.MODE
TV/VCR
T.MUTE
C4 (BG/T)
V.REF
AVss
Vee
Vcc
P.DOWN
BAND.A
BAND.B
AFT.L
AFT.H
AFT
S0
S1
T0 T1 T2 T3 T4 T5 T6 T7 T8 T9 S15 S14 S13 S12 S11 S10 S9 S8 S7 S6 S5 S4 S3 S2
IB2 RGLD 47K×7
TR2 TR3 TR4 TR5 TR6
TR2, TR8: DTC143ES
TR3~TR7: DTC143EL
AC.3 S0 S1 S2 S3 S4 S5 S6 S7 S8 S9 S10 S12 S13
1G 2G 3G 4G 5G 6G 7G 8G 9G 10G
K0
K1
K2
K3
D2 D3 D5 D6 D7 D9
S15 S14 S13 S12
D16 D17 D18
MULTI (+) or A.DUB
SW1
SW5 SPEED
SW7 REC
SW6 TV/VCR
SW8 I-HQ
SW2 MULTI (-) or INSERT
TR1 2SC3330
C2 0.001
R1 68K
C3 SRE 47/16
R2 3.3K
R3 33K
R4 75
PJ1
FRONT VIDEO IN
FV.SW
R5 330
PJ2
FRONT AUDIO L IN
C4 220P
C5 100P
R6 220K
FA.SW
R7 330
PJ3
FRONT AUDIO R IN
C6 220P
C7 100P
R8 220K
PJ4
MIC IN
P5
1 NC
2 NC
3 S0
4 S.DET-P
5 S1
6 NC
7 S2
8 J2
9 S3
10 J1
11 S4
12 K0
13 S5
14 K1
15 S6
16 K2
17 S7
18 D.GND
19 S8
20 A.GND
21 EDIT
22 VR.L
23 K3
24 Vref
25 RESET.IN
26 VR.R
TR2 DTA114TL
D4
SW9 (DOOR)
D6
S5
PDC
ON ←→ OFF
VPS AUTO REC
ON ←→ OFF
SW10
D7
S6
PAL ←→ MESECAM
AUTO ←→ PAL
SW11
D9
D10
S2
S3
STEREO RESEPTION
(NICAM-FM) (FM)
AUTO ←→ MONO
SW13
D13
S2
JS1
AUDIO SELECT
NORMAL ←→ MIX
SW12
D15
S1
EDIT
OFF ←→ ON
SW14
TR4 DTA114TL
S4
D12
S0 S1 S2 S3
D16 SW2 POWER
D17 SW4 CH.DOWN
D18 SW6 TIM.H
D19 SW8 TIM.M
RESET SW1
SW3 EJECT
SW5 CH.UP
SW7 Q-STOP
WF6
A.GND
VR.L
Vref
VR.R
JS2
P7
J1
D.GND
J2
S5
K1
S6
S7
S8
D21 D22 D23 D24
WP6
1 A.GND
2 VR.L
3 Vref
4 VR.R
VR PCB
WP1
1 S8
2 S7
3 S6
4 K1
5 S5
6 J2
7 D.GND
8 J1
JOG
V1
OPERATION(2) PCB V1154B506A
NOTE:
UNLESS OTHERWI
ALL RESISTORS
ALL CAPACITORS
ALL ELECTROLYTI
ALL DIODE ARE
INDICATED VOLTA
DURING E-E (STO


F
G
H
I
J
K
1
2
3
4
5
6
7
8
TO MAIN PCB (2/3) P301
TO VPST/PDC PCB P1
OPERATION (1) PCB V1154B5050
TV.MODE
TV/VCR
PWM
-31V
P.DOWN
AFT.L
AFT.H
BAND.A
BAND.B
AFT
AC3.7V
AC3.7V
A.GND
VR.R
Vref
VR.L
WP1
VPS.CLK
VPS.SI
VPS.S0
VPS.REDY
RESET
WP2
FL1
FV548G
FLD
AC.3
S0
S1
S2
S3
S4
S5
S6
S7
S8
S9
S10
S11
S12
S13
S14
S15
1G
2G
3G
4G
5G
6G
7G
8G
9G
10G
T1
T3
T5
C5
SRE 100/6.3
C4 0.01 (N)
IB2
RGLD 47K×7
TR1
DTC144ES
TR2
TR3
TR4
TR5
TR6
TR7
TR8
TR2, TR8:DTC143ES
TR3~TR7:DTC143EL
-28.7V
-28.8V
-28.5V
-28.6V
5.4V
T0
T2
T4
T6
T8
T9
K0
K1
K2
K3
D2
D3
D5
D6
D7
D9
D10
D12
D13
D14
D16
D17
D18
D19
D20
D21
SW1
MULTI (+) or A.DUB
SW2
MULTI (−) or INSERT
SW5 SPEED
SW7 REC
SW9 TIMER
SW11 RWD
SW13 STOP
SW6 TV/VCR
SW8 I-HQ
SW10 FF
SW12 PAUSE /STILL
SW14 PLAY
TV.MODE
TV/VCR
T.MUTE
C4 (BG/T)
4.3V
5.2V
0V
R28
47K
R29
47K
D1
-22.6V
WF6
A.GND
VR.L
Vref
VR.R
WP6
REC LEVEL
R10
33K
R11
33K
VR3
RS30 B20KΩ×2
VR PCB V1154B506C
JS1
JS2
STEREO RESEPTION
(NICAM-FM) (FM)
AUTO ↔ MONO
PAL ↔ MESECAM
AUTO ↔ PAL
SW11
SW13
S2
S3
P7
J1
D.GND
J2
S5
K1
S6
S7
S8
D21
D22
D23
D24
WP1
JOG/SHUTTLE
SRGPPJ-1
JOG/SHUTTLE PCB V1154C5070
EDIT
OFF ↔ ON
SW14
TR4
DTA114TL
2.2V
2.7V
S4
D12
S1
D17
D18
D19
SW4 CH.DOWN
SW6 TIM.H
SW8 TIM.M
SW5 CH.UP
SW7 Q-STOP

OPERATION (1) PCB

		EK-VN	EOH-D	EOH-DN	EOH-N	EOG-VD
D2	PDCJ	○				
D5	EOGJ				○	
D6	DEC				○	
D7	AUTOJ				○	
D9	NICAMJ	○		○	○	
D10	EKJ	○				
D14	BAND4J		○	○	○	

OPERATION (2) PCB

		EK-VN	EOH-D	EOH-DN	EOH-N	EOG-VD
D9	AUTO/PAL					○
D10	PAL/MESECAM		○	○	○	
D13	NICAM	○		○	○	
SW 11			○	○	○	○
SW 13		○		○	○	

B (POWER SUPPLY) LINE

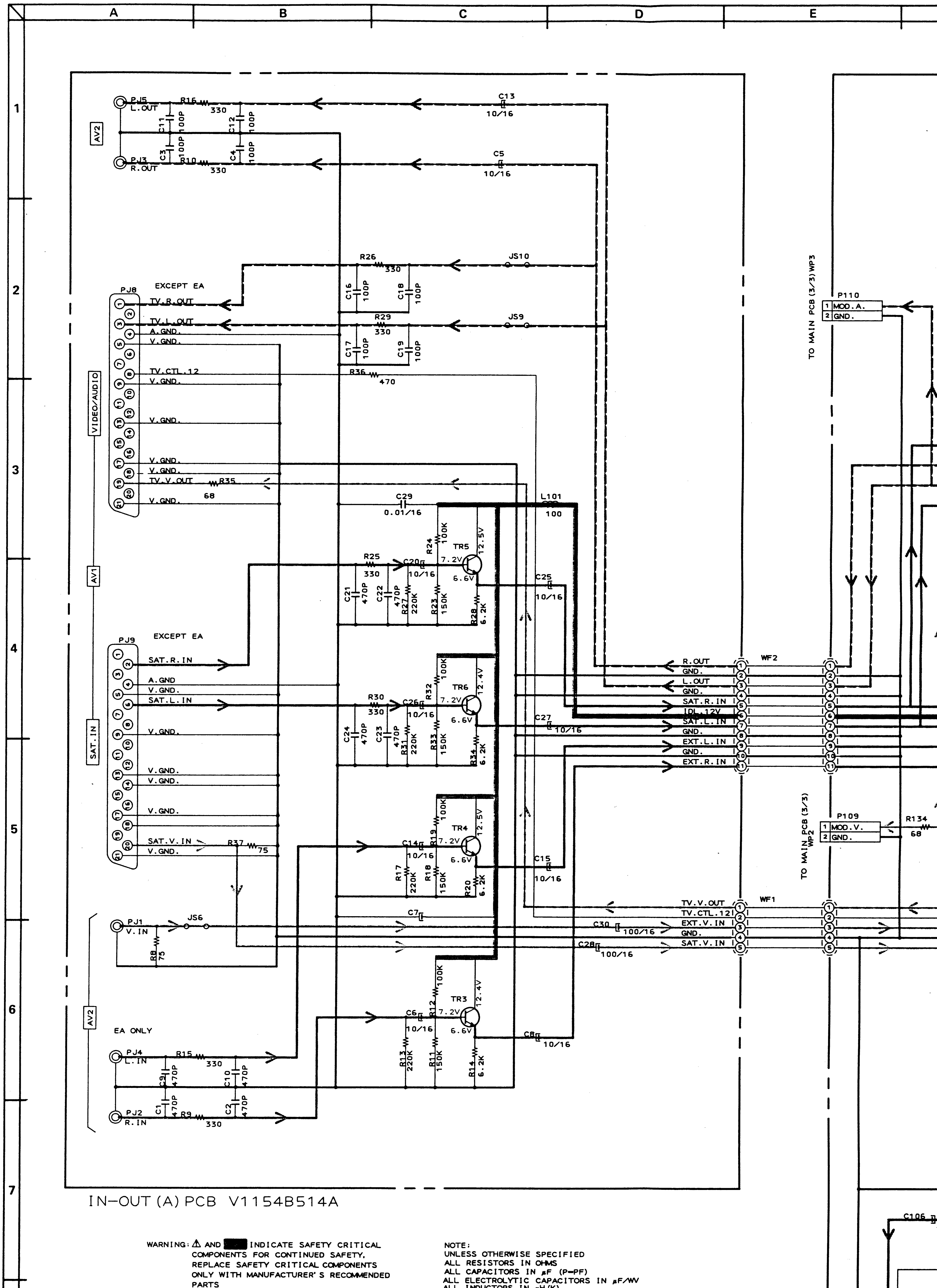
AUDIO IN SIGNAL

VIDEO IN SIGNAL

NOTE;
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV
ALL DIODE ARE 1SS131T-77

INDICATED VOLTAGES WERE MEASURED
DURING E-E (STOP) MODE.

VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
OPERATION (1), (2) & FRONT
SCHEMATC DIAGRAM
No.16-8 V115408M
A1


A
B
C
D
E
1
2
3
4
5
6
7
8
AV2
PJ5
L.OUT
R16
330
C11
100P
C12
100P
C3
100P
C4
100P
PJ3
R.OUT
R10
330
C13
10/16
C5
10/16
R26
330
JS10
PJ8
EXCEPT EA
TV.R.OUT
TV.L.OUT
A.GND.
V.GND.
TV.CTL.12
V.GND.
V.GND.
V.GND.
V.GND.
TV.V.OUT
R35
68
V.GND.
C16
100P
C18
100P
R29
330
JS9
C17
100P
C19
100P
R36
470
VIDEO/AUDIO
C29
0.01/16
L101
100
R24
100K
TR5
12.5V
7.2V
6.6V
R25
330
C20
10/16
C21
470P
C22
470P
R27
220K
R23
150K
R28
6.2K
C25
10/16
AV1
PJ9
EXCEPT EA
SAT.R.IN
A.GND
V.GND.
SAT.L.IN
V.GND.
V.GND.
V.GND.
V.GND.
SAT.V.IN
R37
75
V.GND.
SAT.IN
R32
100K
TR6
12.4V
7.2V
6.6V
R30
330
C26
10/16
C24
470P
C23
470P
R31
220K
R33
150K
R34
6.2K
C27
10/16
R19
100K
TR4
12.5V
7.2V
6.6V
C14
10/16
R17
220K
R18
150K
R20
6.2K
C15
10/16
PJ1
V.IN
JS6
R8
75
C7
C30
100/16
C28
100/16
R12
100K
TR3
12.4V
7.2V
6.6V
C6
10/16
R13
220K
R11
150K
R14
6.2K
C8
10/16
EA ONLY
PJ4
L.IN
R15
330
C9
470P
C10
470P
C1
470P
C2
470P
PJ2
R.IN
R9
330
R.OUT
GND.
L.OUT
GND.
SAT.R.IN
IDL.12V
SAT.L.IN
GND.
EXT.L.IN
GND.
EXT.R.IN
WF2
TV.V.OUT
TV.CTL.12
EXT.V.IN
GND.
SAT.V.IN
WF1
TO MAIN PCB (3/3) WP3
P110
1 MOD.A.
2 GND.
TO MAIN PCB (3/3) WP2
P109
1 MOD.V.
2 GND.
R134
68
C106
WP101
1 GND.
2 MIC.OUT
3 MIC.SW.
TO MAIN PCB (2/3) P20

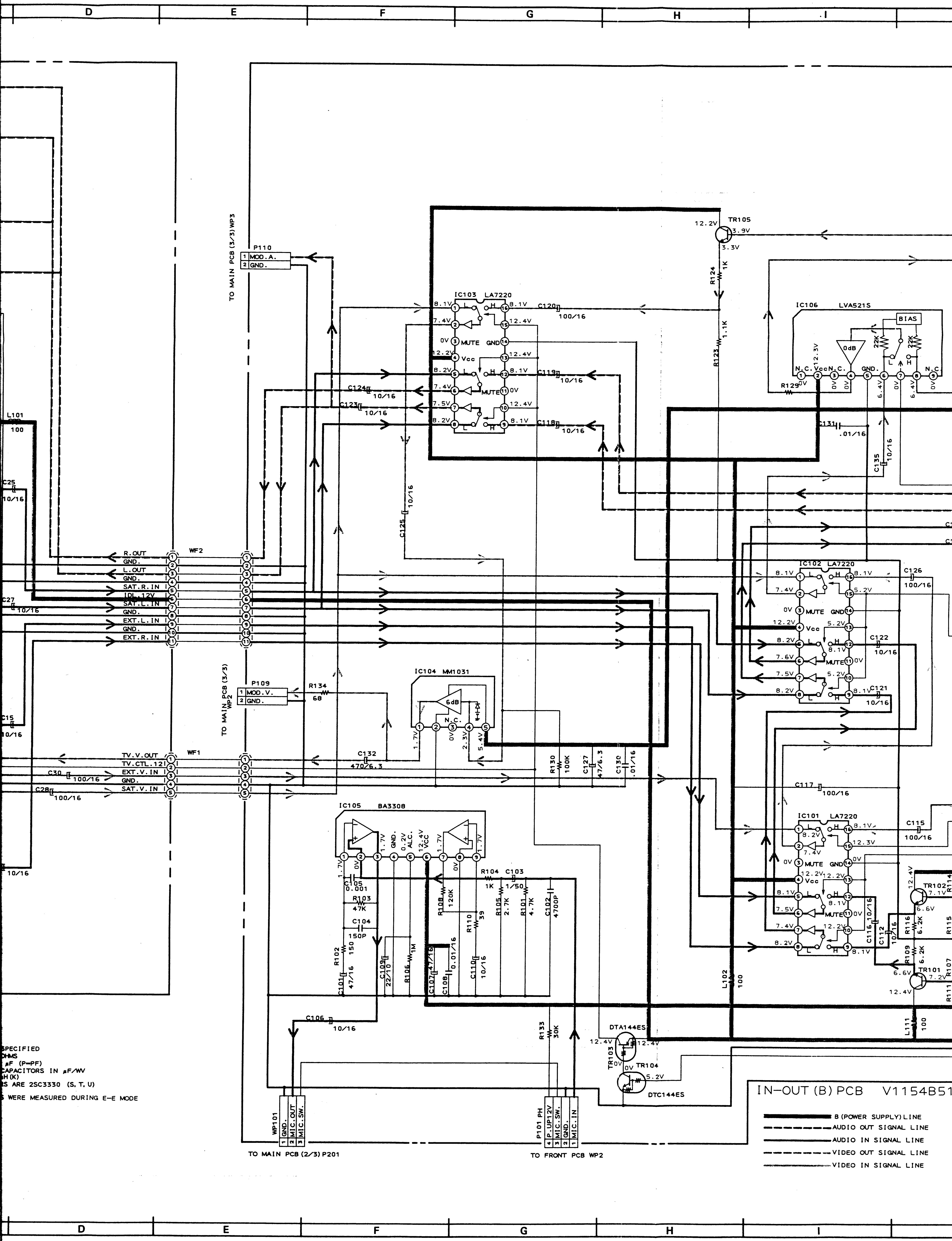
IN—OUT (A) PCB V1154B514A

WARNING: ⚠ AND ■ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ■, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ, POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN μF/WV
ALL INDUCTORS IN μH (K)
ALL NPN TRANSISTORS ARE 2SC3330 (S, T, U)

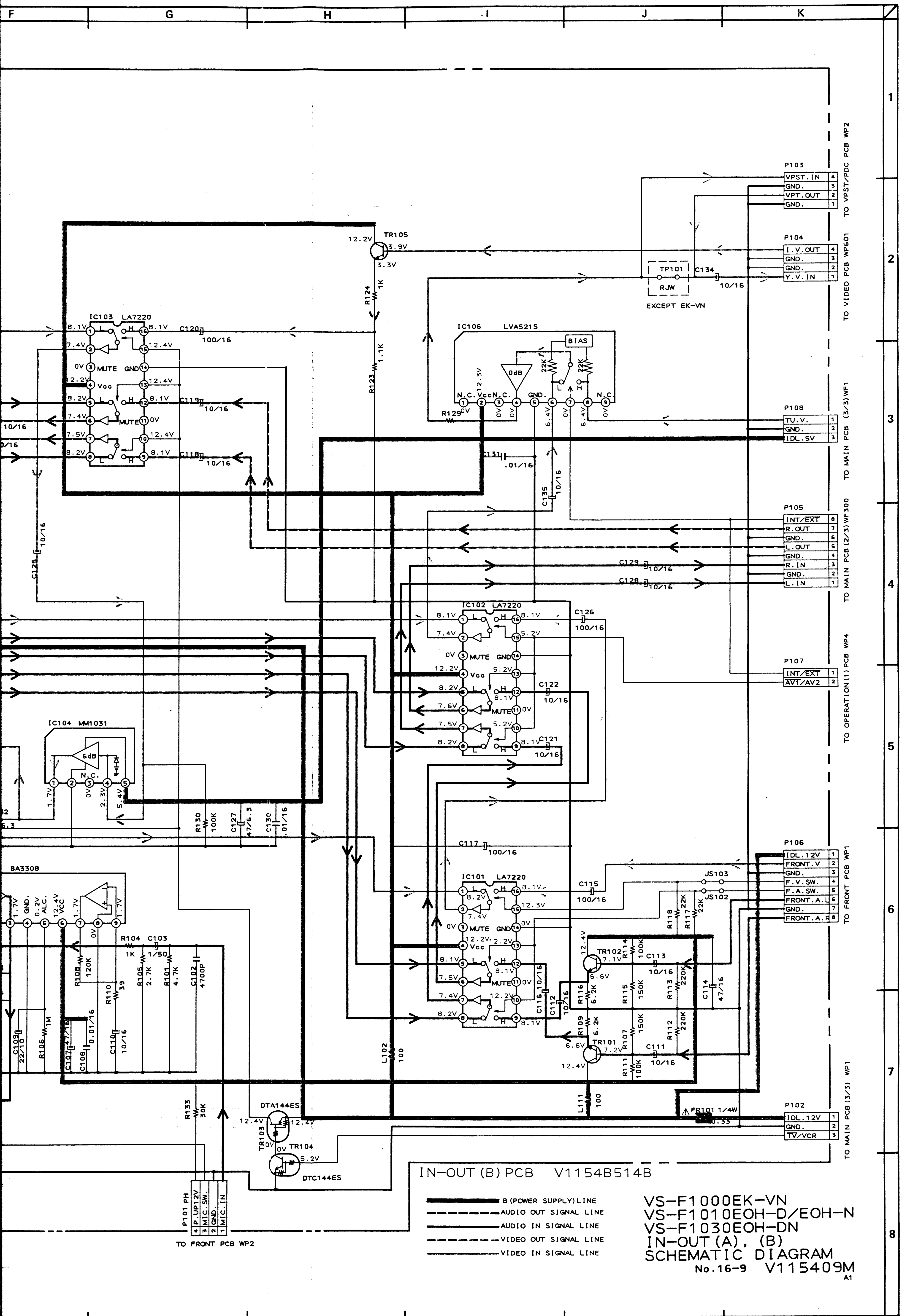
INDICATED VOLTAGES WERE MEASURED DURING E-E MODE
(INPUT: AV2-FRONT)


D
E
F
G
H
I
TO MAIN PCB (3/3) WP3
P110
1 MOD.A.
2 GND.
TR105
12.2V
3.9V
3.3V
R124 1K
R123 1.1K
IC103 LA7220
8.1V
7.4V
0V MUTE GND
12.2V Vcc
8.2V
7.5V
12.4V
C120 100/16
C119 10/16
C118 10/16
C124 10/16
C123 10/16
C125 10/16
IC106 LVA5215
BIAS
0dB
22K
N.C. Vcc N.C. GND. N.C.
R129
C131 .01/16
C135 10/16
L101 100
C25 10/16
C27 10/16
C15 10/16
WF2
R.OUT
GND.
L.OUT
SAT.R.IN
IDL 12V
SAT.L.IN
EXT.L.IN
EXT.R.IN
IC102 LA7220
5.2V
C126 100/16
C122 10/16
C121 10/16
TO MAIN PCB (3/3) WP2
P109
1 MOD.V.
2 GND.
R134 68
IC104 MM1031
6dB
1.7V
2.3V
5.4V
WF1
TV.V.OUT
TV.CTL.12
EXT.V.IN
SAT.V.IN
C30 100/16
C28 100/16
C132 470/6.3
R130 100K
C127 47/6.3
C130 .01/16
C117 100/16
IC101 LA7220
C115 100/16
TR102 7.1V
6.6V
R116 6.2K
R109 6.2K
TR101 7.2V
6.6V
12.4V
C116 10/16
C112 10/16
L102 100
L111 100
IC105 BA3308
GND.
0.2V ALC.
12.4V VCC
C105 0.001
R103 47K
C104 150P
R102 150
C101 47/16
C109 22/10
R106 1M
C107 47/16
C108 0.01/16
R108 120K
R110 39
C110 10/16
R104 1K
C103 1/50
R105 2.7K
R101 4.7K
C102 4700P
C106 10/16
R133 30K
DTA144ES
TR103
TR104
DTC144ES
5.2V
WP101
1 GND.
2 MIC.OUT
3 MIC.SW.
TO MAIN PCB (2/3) P201
P101 PH
4 P.UP12V
3 MIC.SW.
2 GND.
1 MIC.IN
TO FRONT PCB WP2

SPECIFIED
OHMS
μF (P=PF)
CAPACITORS IN μF/WV
μH(K)
S ARE 2SC3330 (S, T, U)
S WERE MEASURED DURING E-E MODE

IN–OUT (B) PCB V1154B51

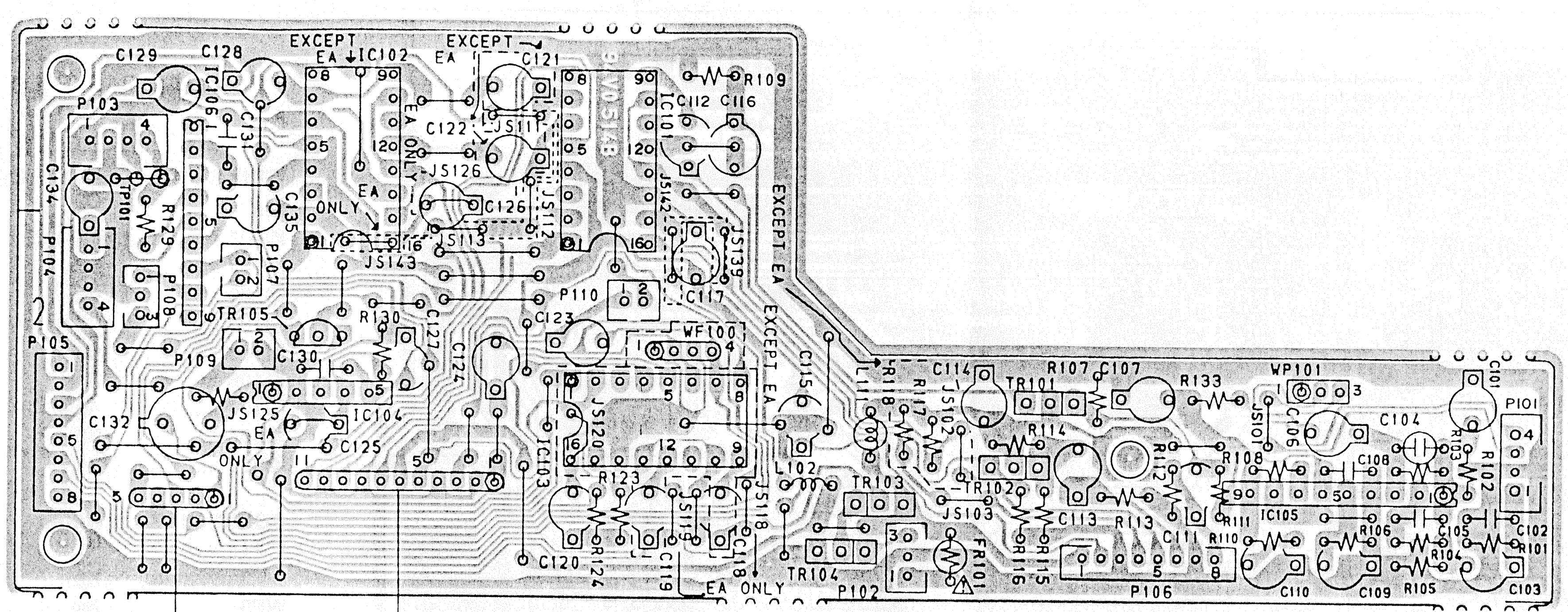
B (POWER SUPPLY) LINE
AUDIO OUT SIGNAL LINE
AUDIO IN SIGNAL LINE
VIDEO OUT SIGNAL LINE
VIDEO IN SIGNAL LINE


F
G
H
I
J
K
1
2
3
4
5
6
7
8
TR105
12.2V
3.9V
3.3V
R124 1K
R123 1.1K
IC103 LA7220
C120 100/16
C119 10/16
C118 10/16
C125 10/16
MUTE
GND
Vcc
IC106 LVA521S
BIAS
0dB
22K
N.C.
GND.
R129
C131 .01/16
C135 10/16
TP101
RJW
C134 10/16
EXCEPT EK-VN
P103
VPST.IN
GND.
VPT.OUT
TO VPST/PDC PCB WP2
P104
I.V.OUT
Y.V.IN
TO VIDEO PCB WP601
P108
TU.V.
IDL.5V
TO MAIN PCB (3/3) WF1
P105
INT/EXT
R.OUT
L.OUT
R.IN
L.IN
TO MAIN PCB (2/3) WF300
C129 10/16
C128 10/16
IC102 LA7220
C126 100/16
C122 10/16
C121 10/16
P107
INT/EXT
AVT/AV2
TO OPERATION (1) PCB WP4
IC104 MM1031
6dB
R130 100K
C127 47/6.3
C130 .01/16
C117 100/16
BA3308
ALC.
VCC
R104 1K
C103 1/50
R108 120K
R105 2.7K
R101 4.7K
C102 4700P
R110 39
C109 22/10
R106 1M
C107 47/16
C108 0.01/16
C110 10/16
IC101 LA7220
C115 100/16
P106
IDL.12V
FRONT.V
F.V.SW.
F.A.SW.
FRONT.A.L
FRONT.A.R
TO FRONT PCB WP1
JS103
JS102
R118
R117 22K
22K
TR102
R114 100K
C113 10/16
C116 10/16
C112 10/16
R116 6.2K
R115 150K
R113 220K
C114 47/16
R109 6.2K
TR101
R107 150K
R112 220K
C111 10/16
R111 100K
L102 100
L111 100
P102
IDL.12V
TV/VCR
TO MAIN PCB (3/3) WP1
FR101 1/4W 0.33
R133 30K
DTA144ES
TR103
TR104
DTC144ES
P101 PH
P.UP12V
MIC.SW.
MIC.IN
TO FRONT PCB WP2

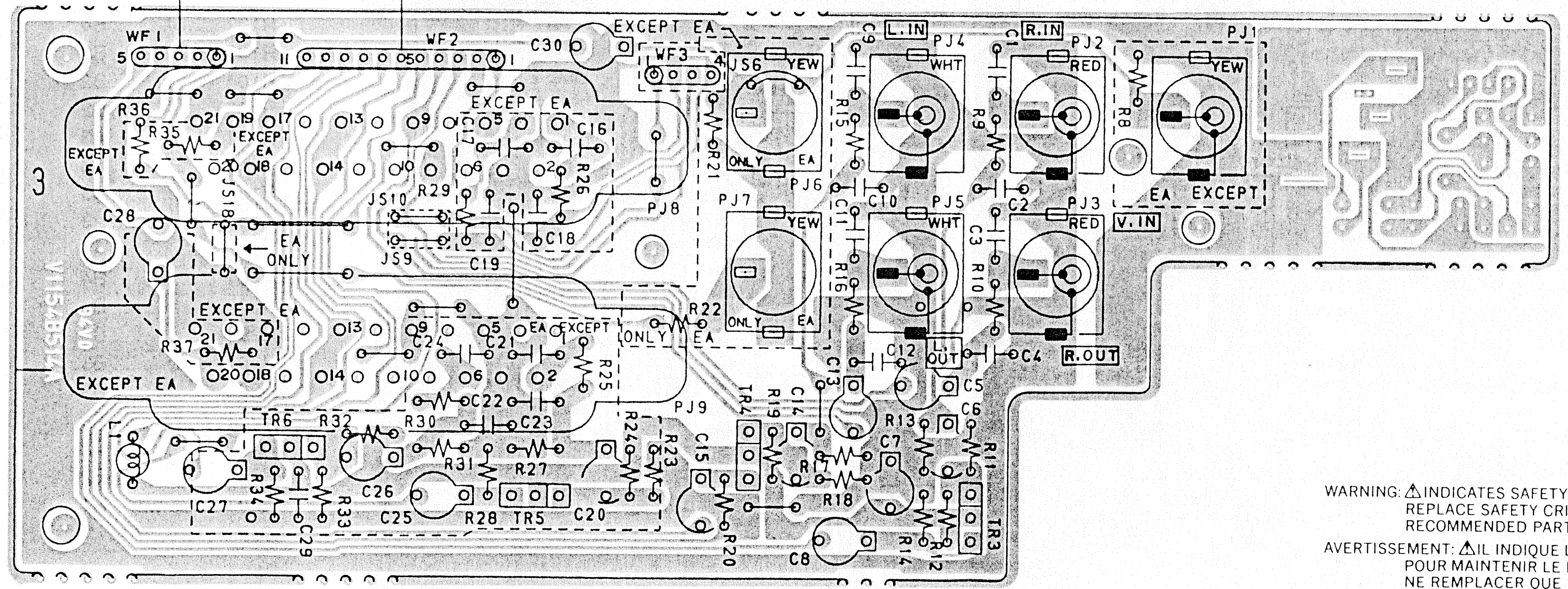
IN-OUT (B) PCB V1154B514B

B (POWER SUPPLY) LINE
AUDIO OUT SIGNAL LINE
AUDIO IN SIGNAL LINE
VIDEO OUT SIGNAL LINE
VIDEO IN SIGNAL LINE

VS-F1000EK-VN
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
IN-OUT (A), (B)
SCHEMATIC DIAGRAM
No.16-9 V115409M
A1


EXCEPT EA
IC102
C121
C129
C128
P103
IC106
C134
TP101
R129
P104
P105
P107
P108
TR105
P109
C132
JS125
IC104
C125
EA ONLY
JS126
JS111
JS112
JS113
JS143
C122
C126
R109
IC101
C112
C116
P110
C117
JS139
WF100
JS120
IC103
R123
C120
R124
C119
C118
JS118
JS119
L102
TR103
JS103
TR104
P102
FR101
EXCEPT EA
C115
L111
R118
R117
JS102
C114
TR101
R114
TR102
R116
R115
R107
C107
R133
WP101
JS101
C106
C104
R103
R102
P101
C101
R108
C108
R112
IC105
C113
R113
C111
R110
R111
R106
R105
R104
C105
C102
R101
P106
C110
C109
C103

IN- OUT (B) PCB V1154B514B

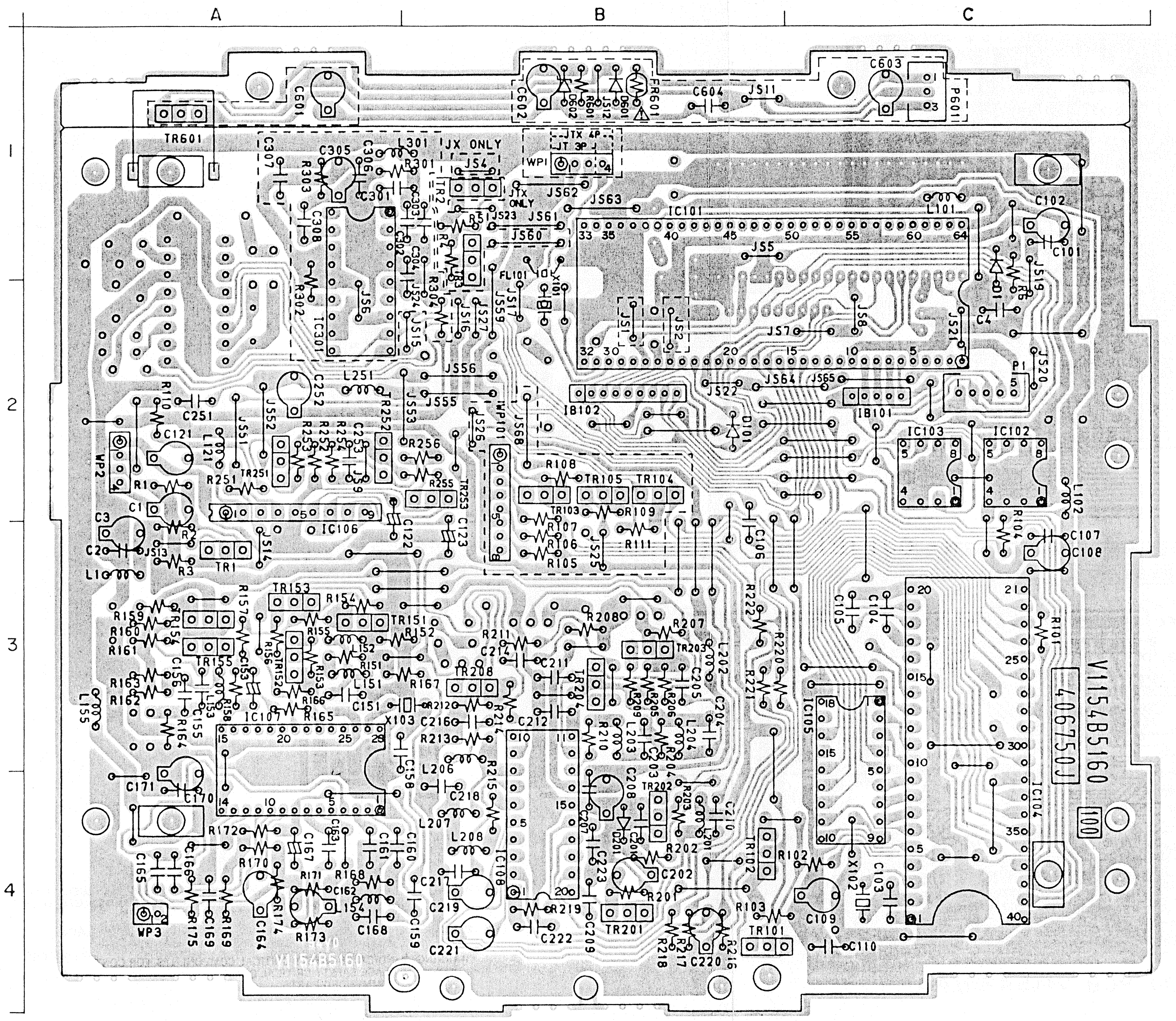

WF1
WF2
C30
EXCEPT EA
WF3
JS6
YEW
ONLY EA
R21
R36
R35
EXCEPT EA
C17
C16
R29
R26
JS10
JS18
C28
EA ONLY
JS9
C19
C18
PJ8
PJ6
PJ7
YEW
R22
ONLY EA
EXCEPT EA
R37
EXCEPT EA
C24
C21
R25
C22
R30
C23
TR6
R32
R31
R27
L1
C27
R34
R33
C26
C25
R28
TR5
C20
C29
PJ9
R24
R23
C15
R20
L.IN
PJ4
WHT
C9
R15
C1
C10
PJ5
WHT
R16
R.IN
PJ2
RED
R9
C2
PJ3
RED
C3
R10
PJ1
YEW
R8
EA EXCEPT
V.IN
C13
C12
L.OUT
C4
R.OUT
TR4
R19
C14
R13
C5
C6
C7
R17
R18
R11
R14
R12
TR3
C8
V1154B514A

IN-OUT(A) PCB V1154B514A

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY,
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.


A
B
C
1
2
3
4
TR601
C601
C602
C603
C604
P601
D601
D602
R601
FR601
JS11
JX ONLY
JTX 4P
JT 3P
WP1
IC301
C305
C307
C308
L301
R301
R302
R303
IC101
L101
C101
C102
IB101
IB102
IC102
IC103
IC104
IC105
IC106
IC107
IC108
WP101
WP2
WP3
TR1
TR101
TR102
TR103
TR104
TR105
TR151
TR152
TR153
TR154
TR155
TR201
TR202
TR203
TR208
TR251
TR252
TR253
L102
L155
C107
C108
P1
X102
X103
V1154B5160
4067 50J
100

VPST / PDC PCB V1154B5160

PRINCIPAL PARTS LOCATION

ICs

IC101	B,C1,2
IC102	C2
IC103	C2
IC104	C3,4
IC105	C3,4
IC106	A2
IC107	A3,4
IC108	B3,4
IC301	A1,2

CONNECTORs & WIREs

WP1	B1
WP2	A2
WP3	A4
WP101	B2,3
P1	C2
P601	C1

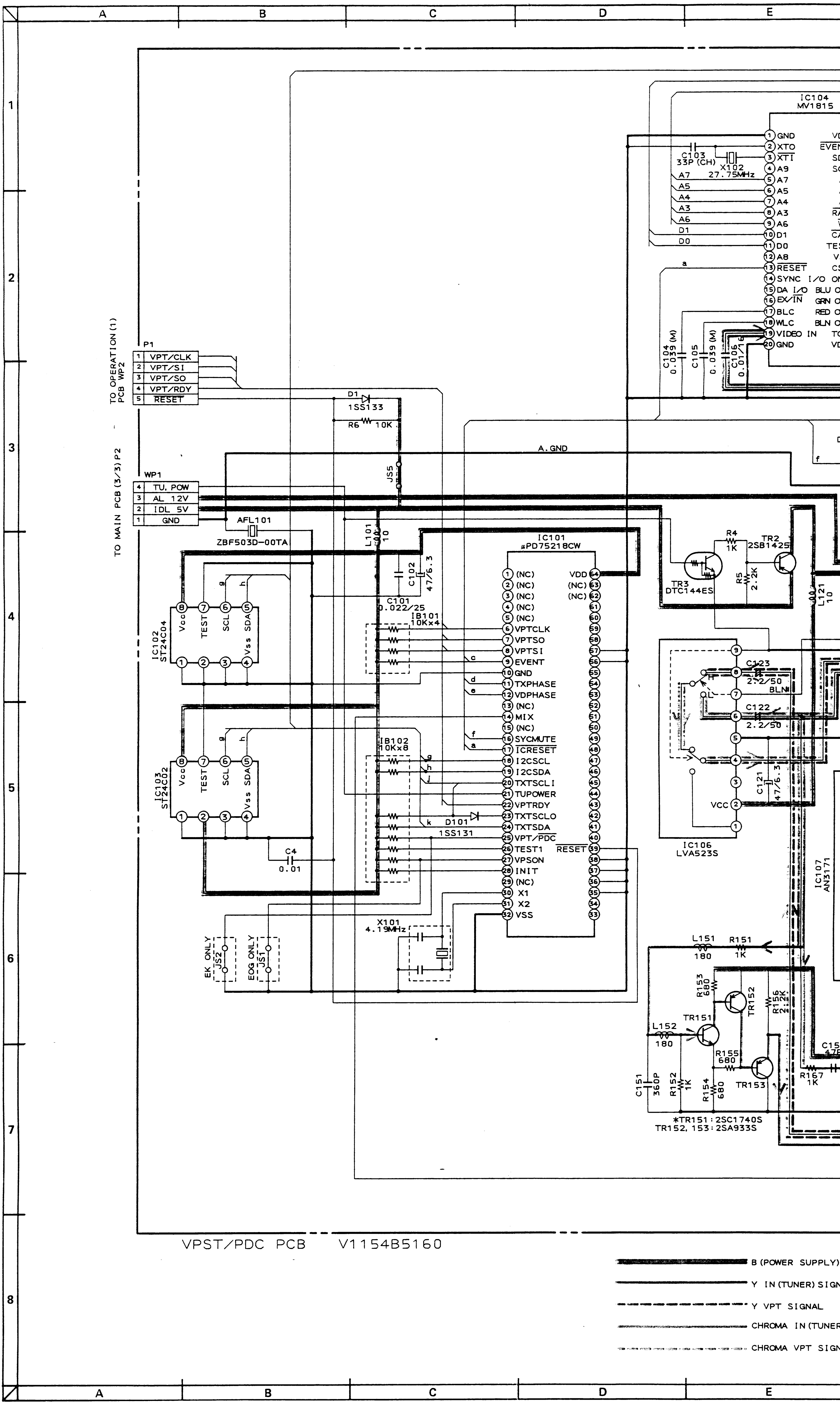
TRANSISTORs

TR1	A1
TR101	B4
TR102	B4
TR103	B2
TR104	B2
TR105	B2
TR151	A3
TR152	A3
TR153	A3
TR154	A3
TR155	A3
TR201	B4
TR202	B4
TR203	B3
TR204	B3
TR208	B3
TR251	A2
TR252	A2
TR253	B2
TR601	A1

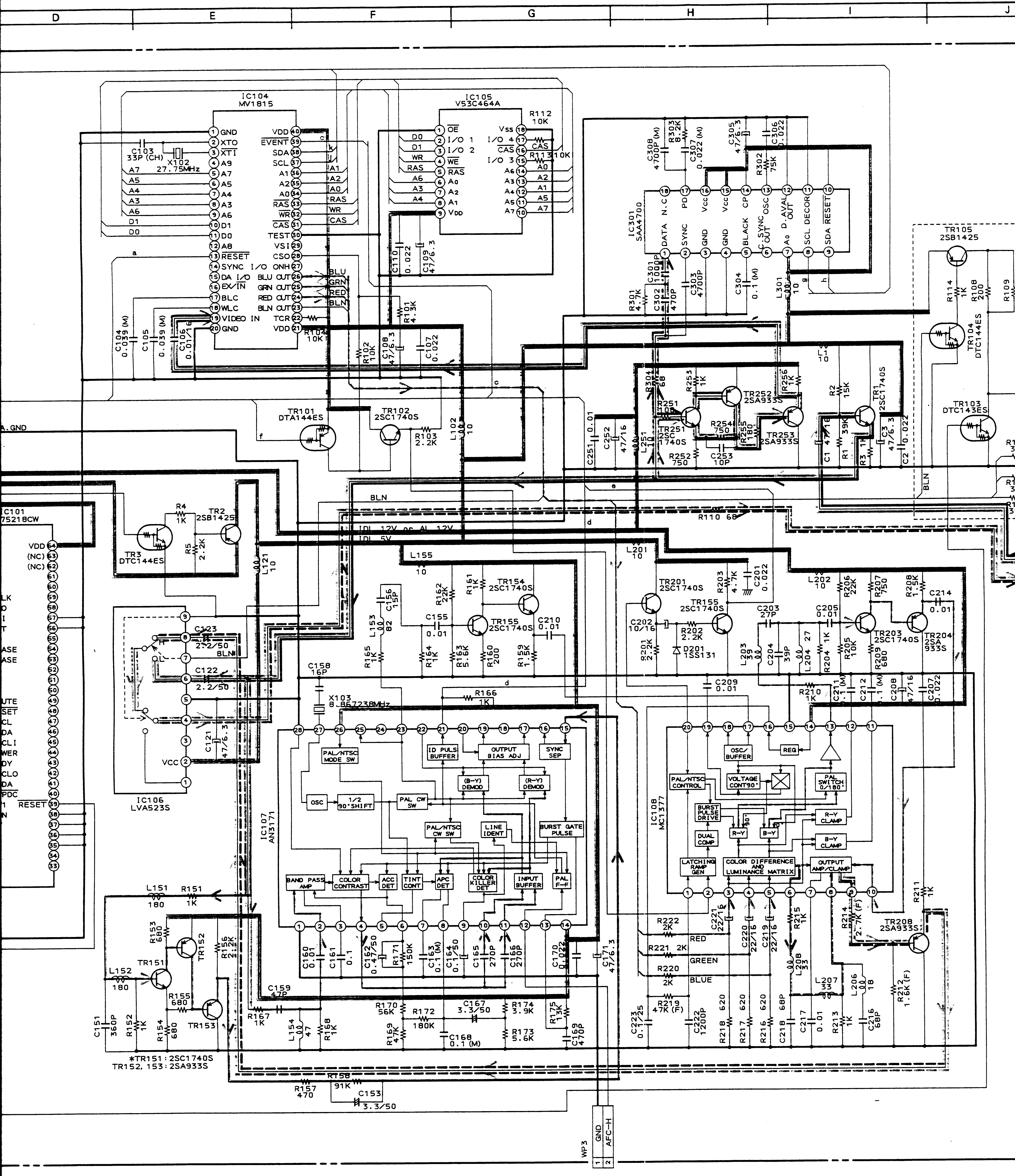
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER. REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.

WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT


A
B
C
D
E
1
2
3
4
5
6
7
8
TO OPERATION (1) PCB WP2
P1
1 VPT/CLK
2 VPT/SI
3 VPT/SO
4 VPT/RDY
5 RESET
TO MAIN PCB (3/3) P2
WP1
4 TU. POW
3 AL 12V
2 IDL 5V
1 GND
D1
1SS133
R6 10K
JS5
A.GND
AFL101
ZBF503D-00TA
L101 10
C102 47/6.3
C101 0.022/25
IB101 10Kx4
IB102 10Kx8
IC102 ST24C04
IC103 ST24C02
Vcc
TEST
SCL
SDA
Vss
C4 0.01
EK ONLY JS2
EQG ONLY JS1
X101 4.19MHz
D101 1SS131
IC101 µPD75218CW
(NC)
VPTCLK
VPTSO
VPTSI
EVENT
GND
TXPHASE
VDPHASE
MIX
SYCMUTE
ICRESET
I2CSCL
I2CSDA
TXTSCLI
TUPOWER
VPTRDY
TXTSCLO
TXTSDA
VPT/PDC
TEST1
VPSON
INIT
X1
X2
VSS
VDD
RESET
IC104 MV1815
GND
XTO
XTI
A9
A7
A5
A4
A3
A6
D1
D0
A8
RESET
SYNC I/O
DA I/O
EX/IN
BLC
WLC
VIDEO IN
C103 33P (CH)
X102 27.75MHz
C104 0.039 (M)
C105 0.039 (M)
C106 0.01/16
R4 1K
TR2 2SB1425
TR3 DTC144ES
R5 2.2K
L121 10
C123 2.2/50
C122 2.2/50
C121 47/6.3
BLN
VCC
IC106 LVA523S
IC107 AN3171
L151 180
R151 1K
R153 680
TR152
R156 2.2K
TR151
L152 180
R155 680
TR153
R167 1K
C151 360P
R152 1K
R154 680
*TR151 : 2SC1740S
TR152, 153 : 2SA933S
B (POWER SUPPLY)
Y IN (TUNER) SIGN
Y VPT SIGNAL
CHROMA IN (TUNER
CHROMA VPT SIGN

VPST/PDC PCB V1154B5160

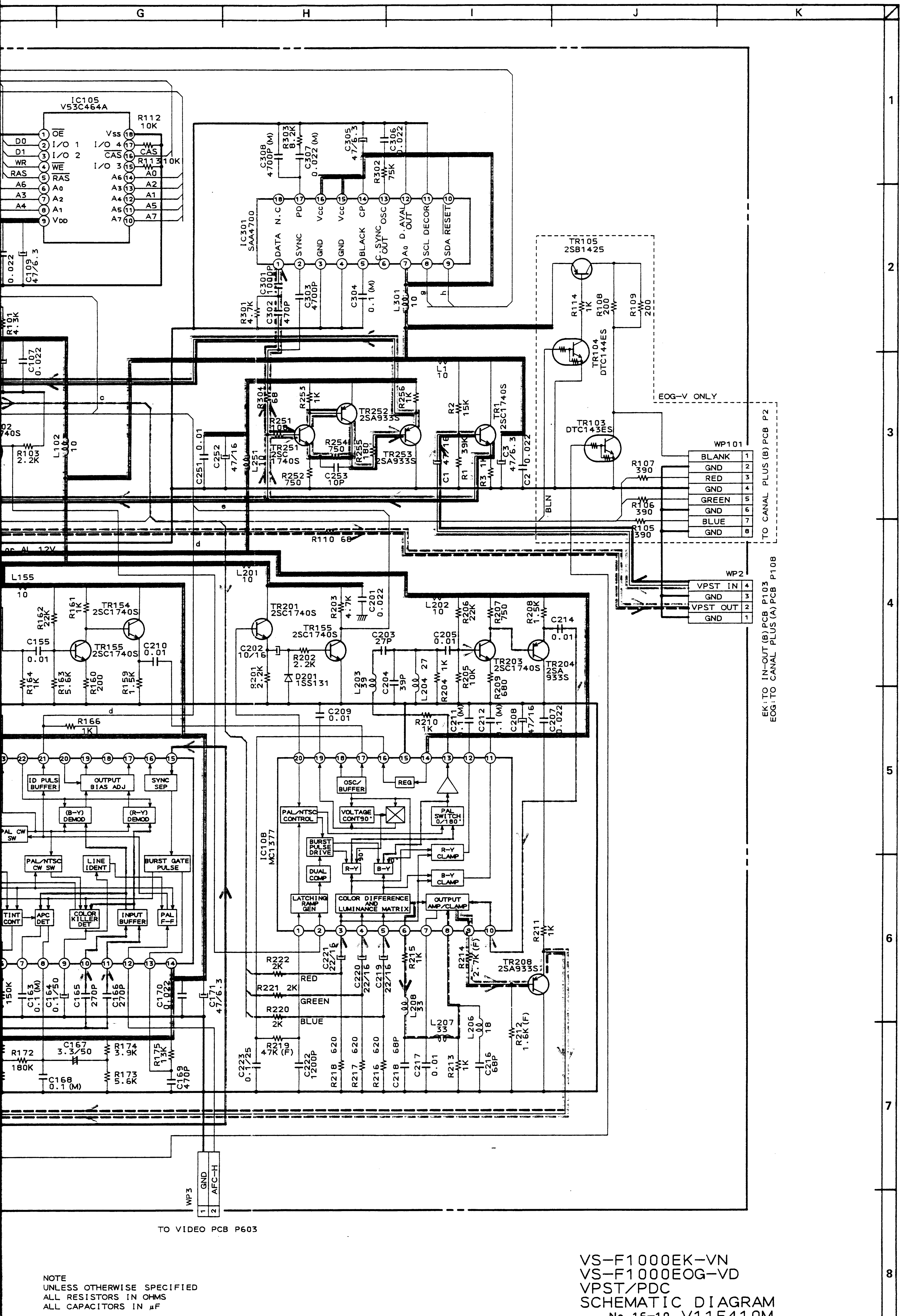

D
E
F
G
H
I
J
IC104
MV1815
IC105
V53C464A
IC301
SAA4700
IC101
75218CW
IC106
LVA523S
IC107
AN3171
IC108
MC1377
TR105
2SB1425
TR104
DTC144ES
TR103
DTC143ES
TR101
DTA144ES
TR102
2SC1740S
TR2
2SB1425
TR3
DTC144ES
TR1
2SC1740S
TR251
2SC1740S
TR252
2SA933S
TR253
2SA933S
TR154
2SC1740S
TR155
2SC1740S
TR201
2SC1740S
TR203
2SC1740S
TR204
2SA933S
TR208
2SA933S
TR151
TR152
TR153
*TR151: 2SC1740S
TR152, 153: 2SA933S
X102
27.75MHz
X103
8.867238MHz
BAND PASS AMP
COLOR CONTRAST
ACC DET
TINT CONT
APC DET
COLOR KILLER DET
INPUT BUFFER
PAL F-F
OSC
1/2 90° SHIFT
PAL CW SW
PAL/NTSC MODE SW
PAL/NTSC CW SW
LINE IDENT
BURST GATE PULSE
ID PULS BUFFER
OUTPUT BIAS ADJ
SYNC SEP
(B-Y) DEMOD
(R-Y) DEMOD
OSC/BUFFER
REG
PAL/NTSC CONTROL
VOLTAGE CONT90°
PAL SWITCH 0/180°
BURST PULSE DRIVE
DUAL COMP
LATCHING RAMP GEN
COLOR DIFFERENCE AND LUMINANCE MATRIX
R-Y
B-Y
R-Y CLAMP
B-Y CLAMP
OUTPUT AMP/CLAMP
RED
GREEN
BLUE
BLN
A.GND
WP3
GND
AFC-H
D
E
F
G
H
I
J

TO VIDEO PCB P603

- B (POWER SUPPLY) LINE
- Y IN (TUNER) SIGNAL
- Y VPT SIGNAL
- CHROMA IN (TUNER) SIGNAL
- CHROMA VPT SIGNAL

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN µF

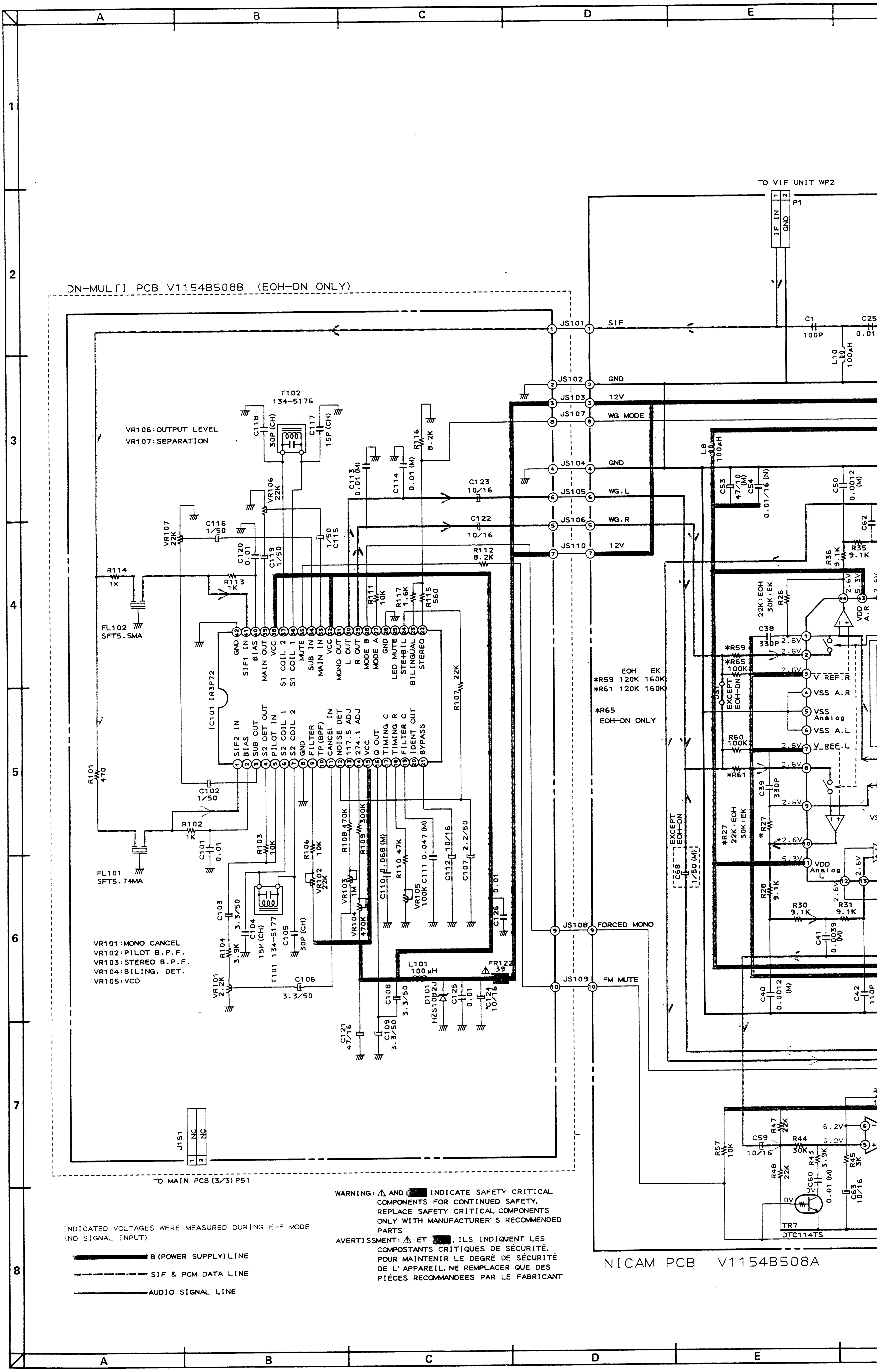
VS−F1
VS−F1
VPST/
SCHEM
No.1


G
H
I
J
K
1
2
3
4
5
6
7
8
IC105
V53C464A
OE
I/O 1
I/O 2
WE
RAS
A0
A2
A1
VDD
Vss
I/O 4
CAS
I/O 3
A6
A3
A4
A5
A7
R112
10K
R113 10K
D0
D1
WR
RAS
A6
A3
A4
C109
47/6.3
0.022
R101
4.3K
C107
0.022
C308
4700P (M)
R303
8.2K
C307
0.022 (M)
C305
47/6.3
C306
0.022
R302
75K
IC301
SAA4700
N.C
PD
Vcc
CP
OSC
D.AVAL OUT
SCL DECOR
SDA RESET
DATA
SYNC
GND
BLACK
C.SYNC OUT
A0
R301
4.7K
C301
1000P
C302
470P
C303
4700P
C304
0.1 (M)
L301
10
TR105
2SB1425
R114
1K
R108
200
R109
200
TR104
DTC144ES
EOG-V ONLY
TR103
DTC143ES
WP101
BLANK
GND
RED
GND
GREEN
GND
BLUE
GND
TO CANAL PLUS (B) PCB P2
R107
390
R106
390
R105
390
BLN
L1
10
R304
68
R253
1K
TR252
2SA933S
R256
1K
R2
15K
TR1
2SC1740S
R251
100
TR251
2SC1740S
R254
750
R255
180
TR253
2SA933S
R252
750
C253
10P
C1
47/16
R1
39K
R3
1K
C3
47/6.3
C2
0.022
C251
0.01
C252
47/16
L251
10
L102
10
R103
2.2K
c
e
d
R110 68
AL 12V
WP2
VPST IN
GND
VPST OUT
GND
EK: TO IN-OUT (B) PCB P103
EOG: TO CANAL PLUS (A) PCB P108
L155
10
L201
10
R162
22K
R161
1K
TR154
2SC1740S
TR201
2SC1740S
R203
4.7K
C201
0.022
L202
10
R206
22K
R207
750
R208
1.5K
C214
0.01
C155
0.01
TR155
2SC1740S
C210
0.01
TR155
2SC1740S
C202
10/16
R202
2.2K
C203
27P
C205
0.01
TR203
2SC1740S
TR204
2SA933S
R164
1K
R163
5.6K
R160
200
R159
1.5K
R201
2.2K
D201
1SS131
L203
39
C204
39P
L204
27
R204
1K
R205
10K
R209
680
R166
1K
C209
0.01
R210
1K
C211
.1 (M)
C212
.1 (M)
C208
47/16
C207
0.022
ID PULS BUFFER
OUTPUT BIAS ADJ
SYNC SEP
(B-Y) DEMOD
(R-Y) DEMOD
PAL CW SW
PAL/NTSC CW SW
LINE IDENT
BURST GATE PULSE
TINT CONT
APC DET
COLOR KILLER DET
INPUT BUFFER
PAL F-F
IC108
MC1377
OSC/ BUFFER
REG
PAL/NTSC CONTROL
VOLTAGE CONT90°
PAL SWITCH 0/180°
BURST PULSE DRIVE
R-Y
B-Y
R-Y CLAMP
B-Y CLAMP
DUAL COMP
LATCHING RAMP GEN
COLOR DIFFERENCE AND LUMINANCE MATRIX
OUTPUT AMP/CLAMP
R211
1K
R222
2K
C221
22/16
C220
22/16
C219
22/16
R215
1K
R214
2.7K (F)
TR208
2SA933S
RED
GREEN
BLUE
R221 2K
R220
2K
L208
33
L207
33
L206
18
R212
1.6K (F)
150K
C163
0.1 (M)
C164
0.1/50
C165
C166
270P
C170
0.022
C171
47/6.3
R172
180K
C167
3.3/50
R174
3.9K
R175
3.3K
C169
470P
C168
0.1 (M)
R173
5.6K
R219
47K (F)
C223
0.1/25
C222
1200P
R218
620
R217
620
R216
620
C218
68P
C217
0.01
R213
1K
C216
68P
WP3
GND
AFC-H
TO VIDEO PCB P603

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF

VS-F1000EK-VN
VS-F1000EOG-VD
VPST/PDC
SCHEMATIC DIAGRAM
No.16-10 V115410M
A1

G H I J K


A
B
C
D
E
1
2
3
4
5
6
7
8
TO VIF UNIT WP2
IF IN
GND
P1
DN-MULTI PCB V1154B508B (EOH-DN ONLY)
JS101
SIF
JS102
GND
JS103
12V
JS107
WG MODE
JS104
GND
JS105
WG.L
JS106
WG.R
JS110
12V
JS108
FORCED MONO
JS109
FM MUTE
T102
134-5176
VR106:OUTPUT LEVEL
VR107:SEPARATION
IC101 IR3P72
SIF1 IN
BIAS
MAIN OUT
VCC
S1 COIL 2
S1 COIL 1
MUTE
SUB IN
MAIN IN
MONO OUT
L OUT
R OUT
MODE B
MODE A
GND
LED MUTE
STE+BIL
BILINGUAL
STEREO
SIF2 IN
BIAS
SUB OUT
S2 DET OUT
PILOT IN
S2 COIL 1
S2 COIL 2
GND
FILTER
TP (BPF)
CANCEL IN
NOISE DET
117.5 ADJ
274.1 ADJ
VCC
Q OUT
TIMING C
TIMING R
FILTER C
IDENT OUT
BYPASS
FL102
SFT5.5MA
FL101
SFT5.74MA
T101 134-5177
L101
100μH
D101
HZS10B2J
FR122
39
VR101:MONO CANCEL
VR102:PILOT B.P.F.
VR103:STEREO B.P.F.
VR104:BILING. DET.
VR105:VCO
J151
NC
NC
TO MAIN PCB (3/3) P51
EOH EK
*R59 120K 160K
*R61 120K 160K
*R65
EOH-DN ONLY
EXCEPT EOH-DN
V REF.R
VSS A.R
VSS Analog
VSS A.L
V REF.L
VDD Analog
VDD A.R
TR7
DTC114TS
NICAM PCB V1154B508A

WARNING: ⚠ AND ▇ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

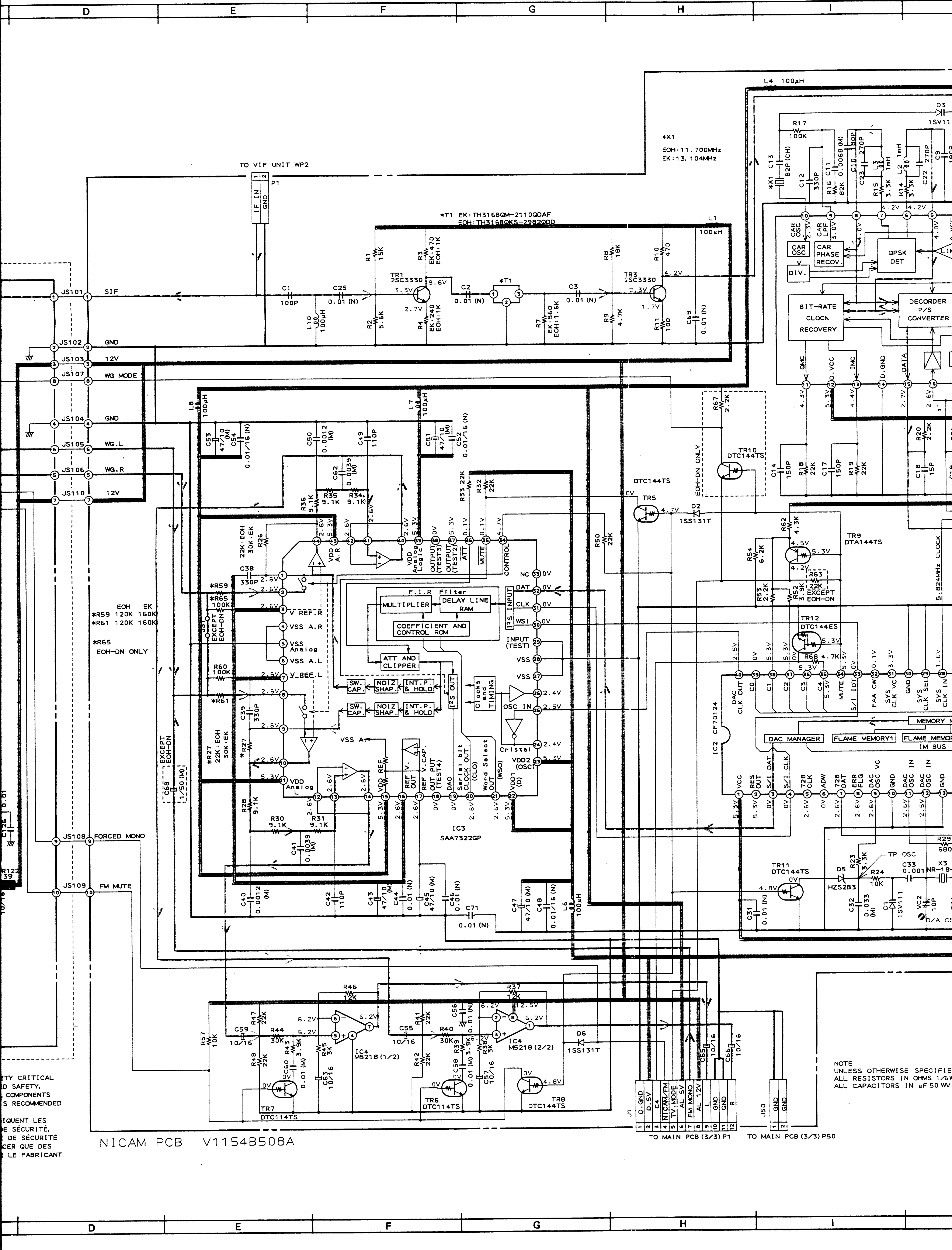
AVERTISSMENT: ⚠ ET ▇, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

INDICATED VOLTAGES WERE MEASURED DURING E-E MODE (NO SIGNAL INPUT)

━━━ B (POWER SUPPLY) LINE

- - - - SIF & PCM DATA LINE

──── AUDIO SIGNAL LINE

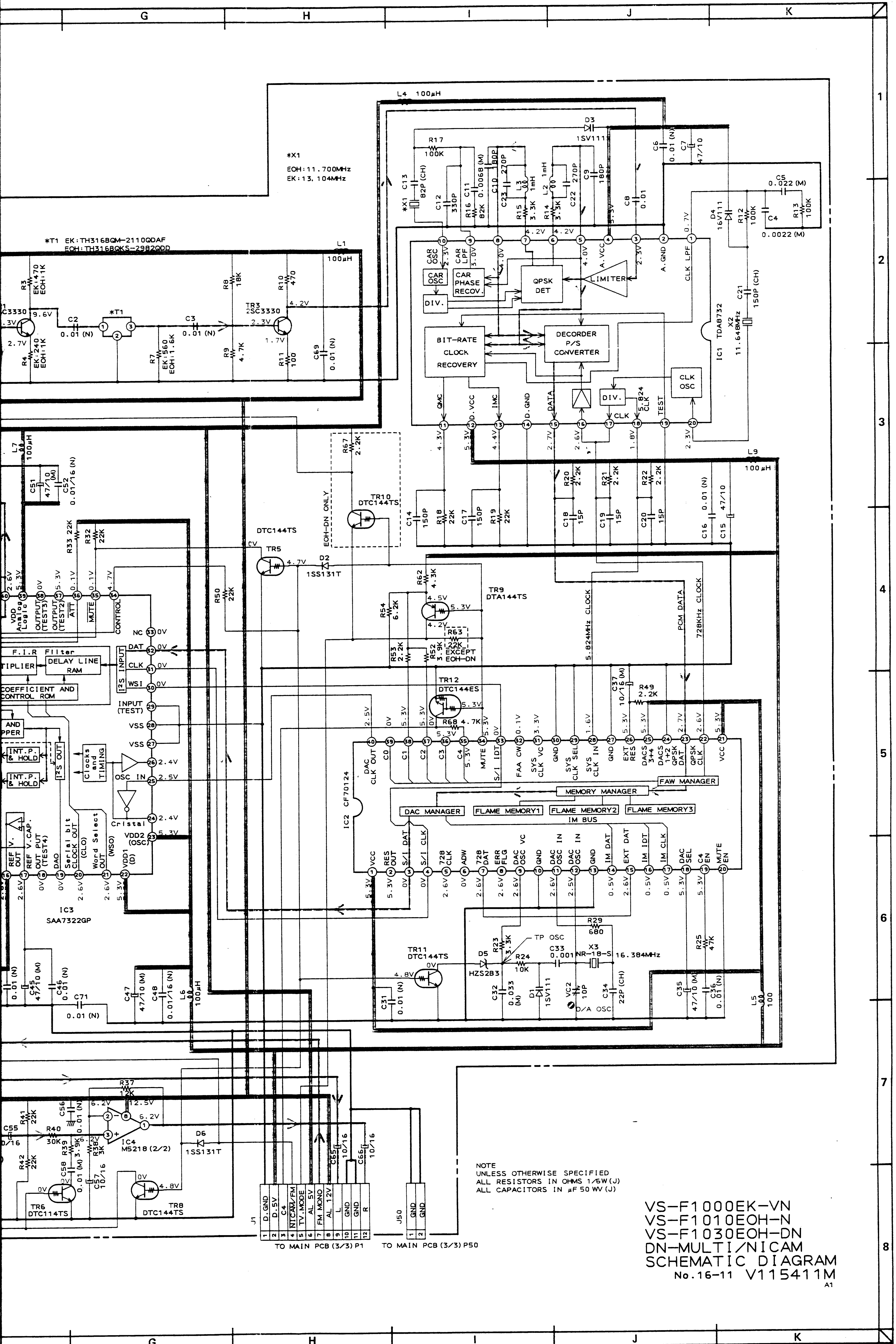

D
E
F
G
H
I
TO VIF UNIT WP2
P1
IF IN
GND
*X1
EOH:11.700MHz
EK:13.104MHz
*T1 EK:TH316BQM-2110QDAF
EOH:TH316BQKS-2982QDD
L4 100µH
L1 100µH
TR1 2SC3330
TR3 2SC3330
JS101 SIF
JS102 GND
JS103 12V
JS107 WG MODE
JS104 GND
JS105 WG.L
JS106 WG.R
JS110 12V
JS108 FORCED MONO
JS109 FM MUTE
EOH EK
*R59 120K 160K
*R61 120K 160K
*R65
EOH-DN ONLY
CAR OSC
CAR LPF
CAR OSC
CAR PHASE RECOV.
QPSK DET
DIV.
BIT-RATE CLOCK RECOVERY
DECORDER P/S CONVERTER
QMC
D.VCC
IMC
D.GND
DATA
EOH-DN ONLY
TR10 DTC144TS
TR5 DTC144TS
D2 1SS131T
TR9 DTA144TS
R63 22K EXCEPT EOH-DN
TR12 DTC144ES
5.824MHz CLOCK
F.I.R Filter
MULTIPLIER
DELAY LINE RAM
COEFFICIENT AND CONTROL ROM
I2S INPUT
ATT AND CLIPPER
SW. CAP.
NOIZ SHAP.
INT.P. & HOLD
I2S OUT
Clocks and TIMING
OSC IN
Cristal
VDD A.R
VDD Analog Logic
OUTPUT (TEST3)
OUTPUT (TEST2)
ATT
MUTE
CONTROL
NC
DAT
CLK
WSI
INPUT (TEST)
VSS
V REF.R
VSS A.R
VSS Analog
VSS A.L
V REF.L
VSS A
VDD Analog
VDD REF
REF V. OUT
REF V.CAP. OUT PUT (TEST4)
DAO
Serial bit CLOCK OUT (CLO)
Word Select OUT (WSO)
VDD1 (D)
VDD2 (OSC)
IC3 SAA7322GP
IC2 CF70124
DAC CLK OUT
C0
C1
C2
C3
C4
MUTE
S/I IDT
FAA CW
SYS CLK VC
GND
SYS CLK SEL
SYS CLK IN
MEMORY
DAC MANAGER
FLAME MEMORY1
FLAME MEMOR
IM BUS
VCC
RES OUT
S/I DAT
S/I CLK
728 CLK
ADW
728 DAT
ERR FLG
DAC OSC
VC
GND
DAC OSC IN
DAC OSC IN
TR11 DTC144TS
D5 HZS2B3
TP OSC
D1 1SV111
VC2
D/A OS
IC4 M5218 (1/2)
IC4 M5218 (2/2)
D6 1SS131T
TR7 DTC114TS
TR6 DTC114TS
TR8 DTC144TS
J1
D.GND
D.5V
C4
NICAM/FM
TV.MODE
AL 5V
FM MONO
AL 12V
L
GND
GND
R
TO MAIN PCB (3/3) P1
J50
GND
GND
TO MAIN PCB (3/3) P50

ETY CRITICAL
ED SAFETY,
COMPONENTS
S RECOMMENDED

IQUENT LES
E SÉCURITÉ,
E DE SÉCURITÉ
CER QUE DES
LE FABRICANT

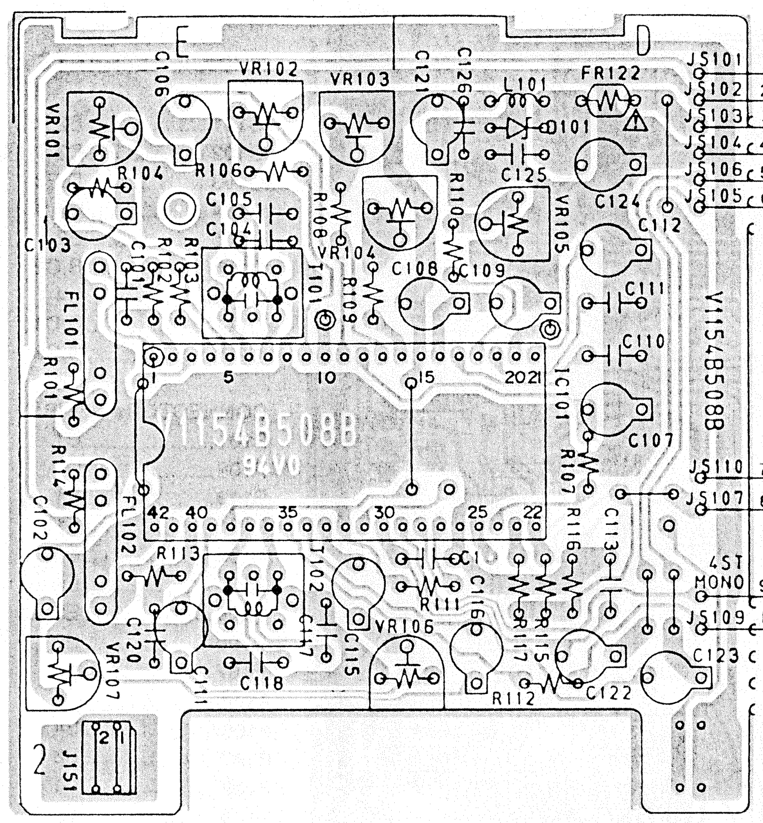
NICAM PCB V1154B508A

NOTE
UNLESS OTHERWISE SPECIFIE
ALL RESISTORS IN OHMS 1/6W
ALL CAPACITORS IN µF 50 WV

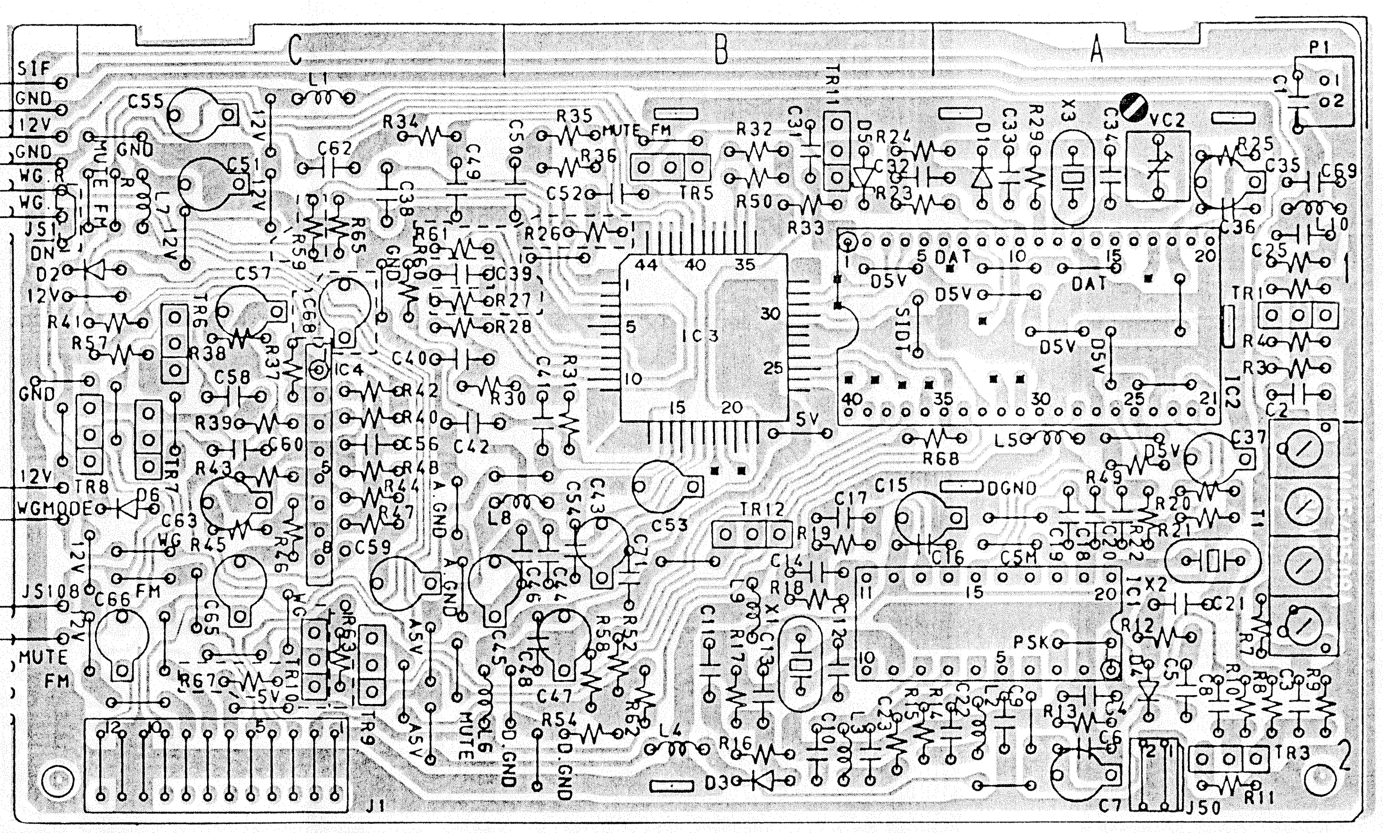

G
H
I
J
K
1
2
3
4
5
6
7
8
*X1
EOH: 11.700MHz
EK: 13.104MHz
*T1 EK: TH316BQM-2110QDAF
EOH: TH316BQKS-2982QDD
L4 100µH
L1 100µH
L7 100µH
L9 100µH
L6 100µH
D3 1SV111
IC1 TDA8732
X2 11.648MHz
CAR OSC
CAR PHASE RECOV.
QPSK DET
LIMITER
DIV.
BIT-RATE CLOCK RECOVERY
DECORDER P/S CONVERTER
CLK OSC
TR3 2SC3330
TR5 DTC144TS
TR9 DTA144TS
TR10 DTC144TS
TR11 DTC144TS
TR12 DTC144ES
EOH-DN ONLY
EXCEPT EOH-DN
D2 1SS131T
5.824MHz CLOCK
PCM DATA
728KHz CLOCK
IC2 CF70124
FAW MANAGER
MEMORY MANAGER
DAC MANAGER
FLAME MEMORY1
FLAME MEMORY2
FLAME MEMORY3
IM BUS
IC3 SAA7322GP
F.I.R Filter
DELAY LINE RAM
COEFFICIENT AND CONTROL ROM
Clocks and TIMING
Cristal
TP OSC
X3 NR-18-S 16.384MHz
D5 HZS2B3
D1 1SV111
D/A OSC
IC4 M5218 (2/2)
D6 1SS131T
TR6 DTC114TS
TR8 DTC144TS
J1
D.GND
D.5V
C4
NICAM/FM
TV.MODE
AL 5V
FM MONO
AL 12V
L
GND
GND
R
J50
GND
GND
TO MAIN PCB (3/3) P1
TO MAIN PCB (3/3) P50

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W (J)
ALL CAPACITORS IN µF 50 WV (J)

VS-F1000EK-VN
VS-F1010EOH-N
VS-F1030EOH-DN
DN-MULTI/NICAM
SCHEMATIC DIAGRAM
No.16-11 V115411M
A1


E
D
JS101
JS102
JS103
JS104
JS105
JS106
JS107
JS108
JS109
JS110
VR101
VR102
VR103
VR104
VR105
VR106
VR107
FR122
L101
D101
IC101
FL101
FL102
T101
T102
VI154B508B
94V0
J151
4ST
MONO

DN - MULTI PCB VII54B508B
(EOH - DN ONLY)

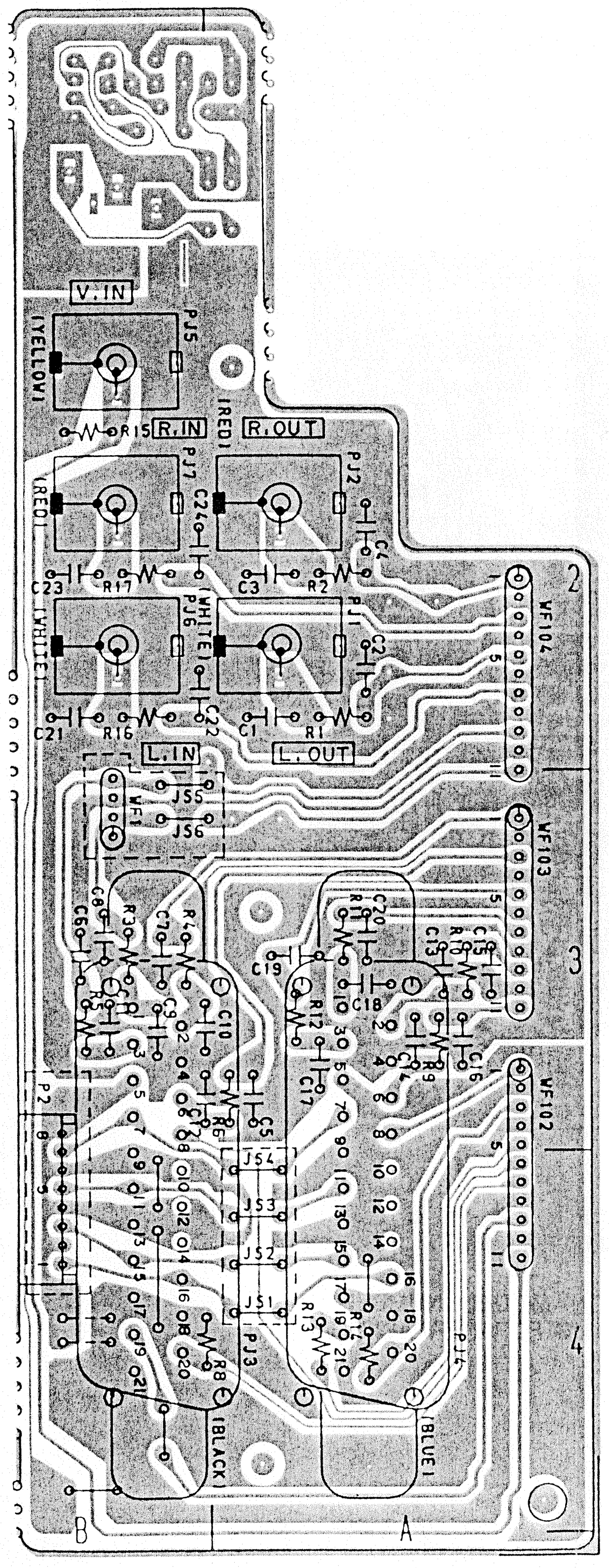

C
B
A
SIF
GND
12V
WG.R
WG.L
JS1
IC1
IC2
IC3
IC4
P1
J1
J50
TR1
TR3
TR5
TR6
TR7
TR8
TR9
TR10
TR11
TR12
X2
X3
VC2
T1
DAT
D5V
SID
DGND
PSK
5V
MUTE FM
A.GND
D.GND
ASV

NICAM PCB VII54B508A

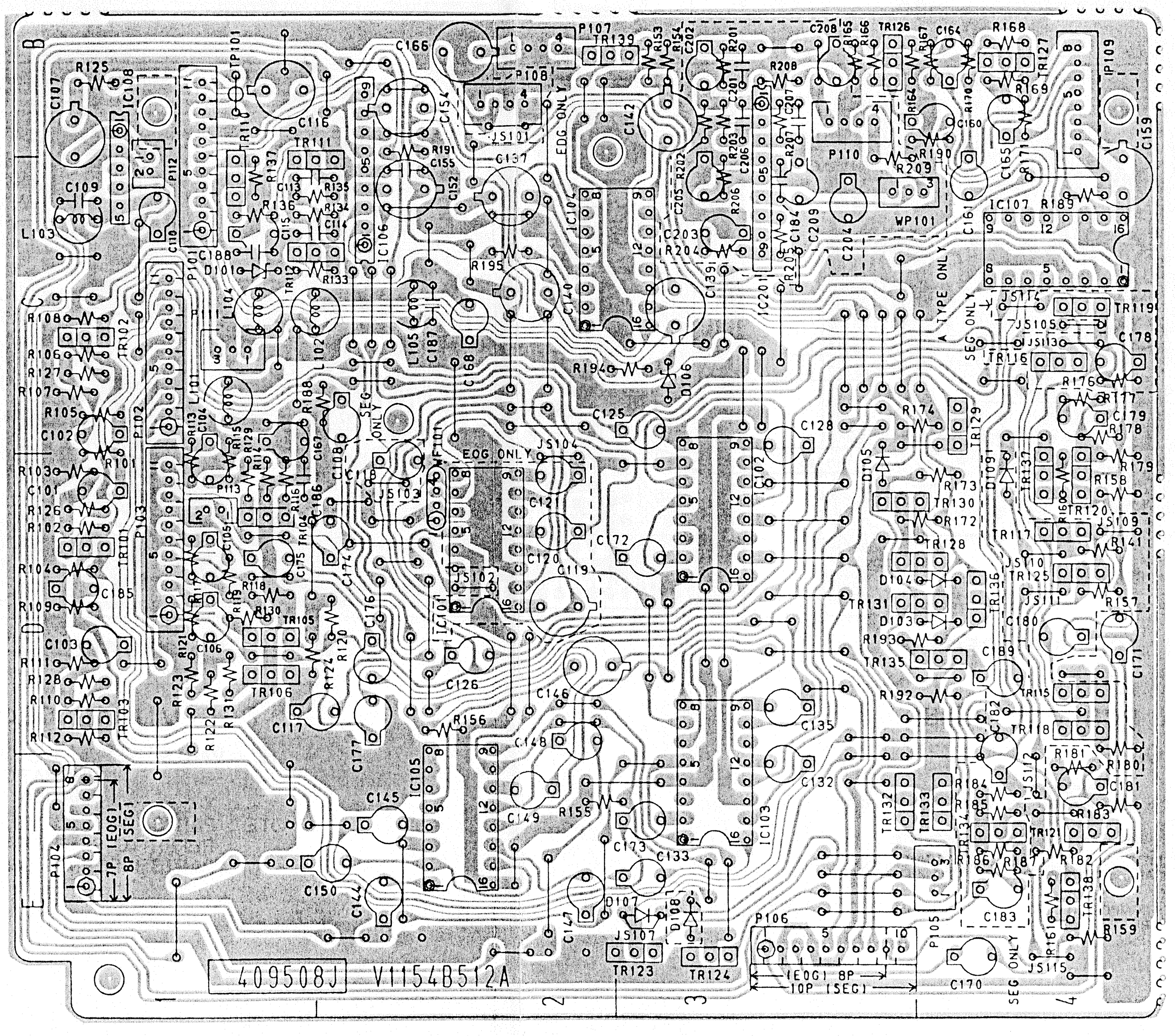
NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING
PARTS INFORMATION.

WARNING: ⚠ INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY.
REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S
RECOMMENDED PARTS

AVERTISSEMENT: ⚠ IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ.
POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL,
NE REMPLACER QUE DES PIÈCES RECOMMANDÉES PAR LE FABRICANT


V.IN
(YELLOW)
PJ5
R.IN
(RED)
R.OUT
PJ7
PJ2
(WHITE)
PJ6
PJ1
L.IN
L.OUT
WF104
WF103
WF102
WF1
JS5
JS6
JS4
JS3
JS2
JS1
PJ3
PJ4
P2
(BLACK)
(BLUE)
1
2
3
4
B
A

CANAL PLUS(B) PCB V1154B512B

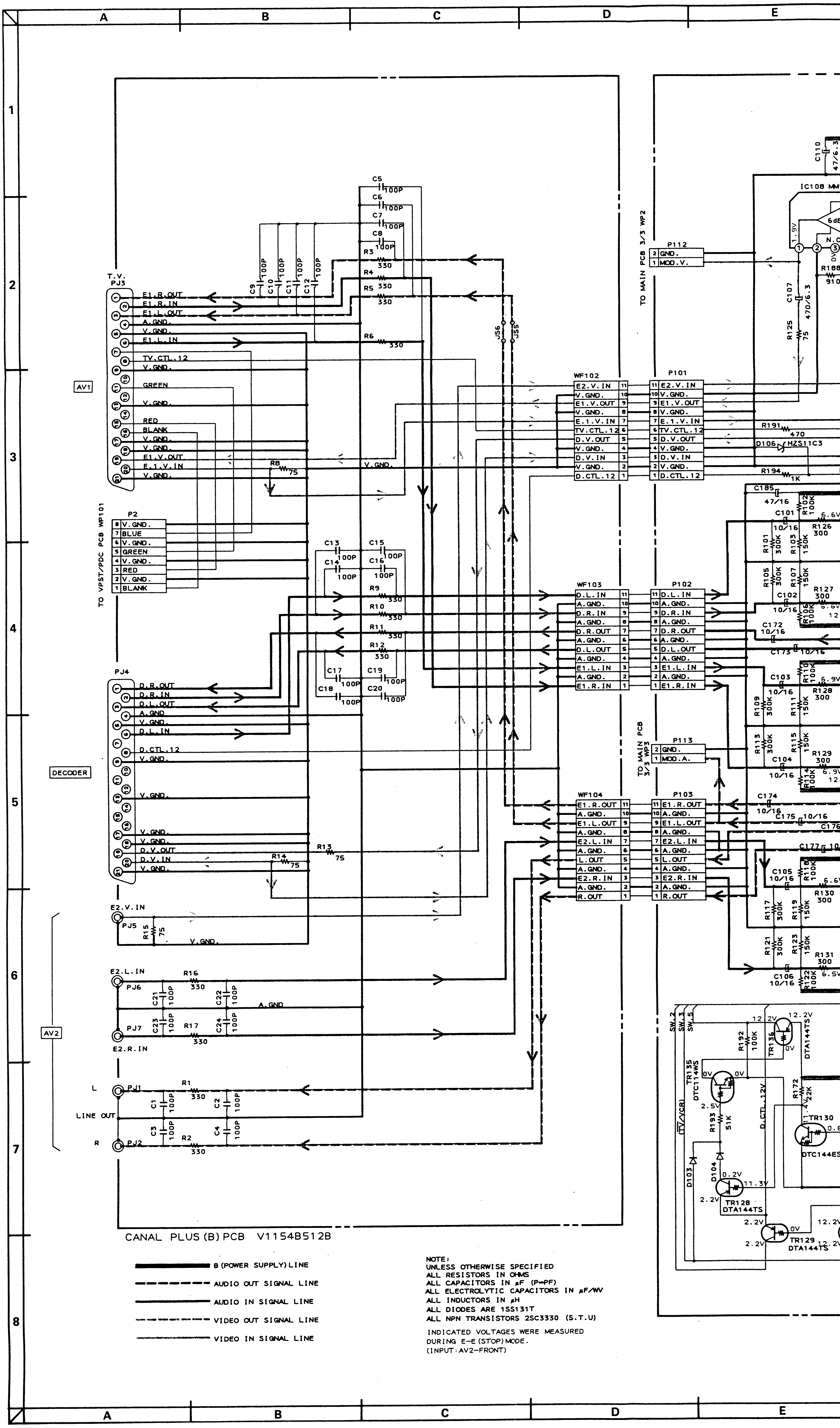

409508J V1154B512A
B
C
D
E
1
2
3
4
EDG ONLY
EOG ONLY
SEG ONLY
A TYPE ONLY
IC101
IC102
IC103
IC104
IC105
IC106
IC107
IC108
IC201
P104
P105
P106
P107
P108
P109
P110
WP101
(EOG) 7P
(SEG) 8P
(EOG) 8P
10P (SEG)

CANAL PLUS(A) PCB V1154B512A

PRINCIPAL PARTS LOCATION

ICs		TRANSISTORs	
IC101	D2	TR101	D1
IC102	D3	TR102	C1
IC103	D,E3	TR103	D1
IC104	C2,3	TR104	D1
IC105	E2	TR105	D1
IC106	B,C2	TR106	D1
IC107	C4	TR110	C1
IC108	B,C1	TR111	C1,2
IC201	B,C3	TR112	C1,2
		TR115	D4
CONNECTORs & WIREs		TR116	C4
P101	C1	TR117	D4
P102	C1	TR118	D4
P103	D1	TR119	C4
P104	E1	TR120	D4
P104A	E1	TR121	E4
P105	E4	TR123	E3
P106	E3	TR124	E3
P106A	E3	TR125	D4
P107	B2	TR126	B3
P108	B2	TR127	B4
P109	B4	TR128	D3,4
P110	B3	TR129	C4
P111	C1	TR130	D3
P112	B,C1	TR131	D3,4
P113	D1	TR132	E3
WF101	D2	TR133	E4
WP101	C3,4	TR134	D4
		TR135	D4
		TR136	D4
		TR137	D4
		TR138	E4
		TR139	B2,3

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING
PARTS INFORMATION.

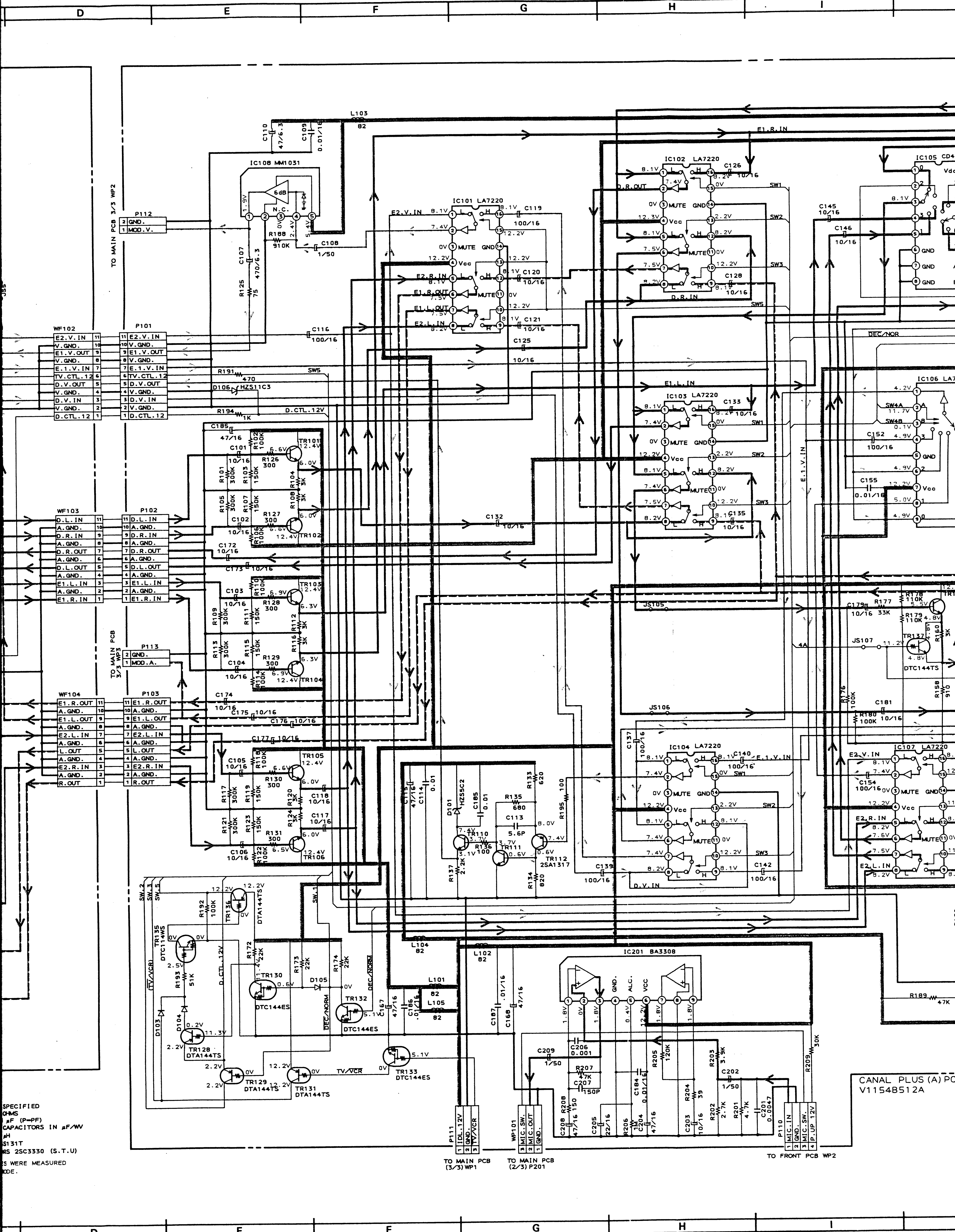


A
B
C
D
E
1
2
3
4
5
6
7
8
T.V. PJ3
E1.R.OUT
E1.R.IN
E1.L.OUT
A.GND.
V.GND.
E1.L.IN
TV.CTL.12
V.GND.
GREEN
V.GND.
RED
BLANK
V.GND.
V.GND.
E1.V.OUT
E.1.V.IN
V.GND.
AV1
TO VPST/PDC PCB WP101
P2
8 V.GND.
7 BLUE
6 V.GND.
5 GREEN
4 V.GND.
3 RED
2 V.GND.
1 BLANK
PJ4
D.R.OUT
D.R.IN
D.L.OUT
A.GND
V.GND.
D.L.IN
D.CTL.12
V.GND.
V.GND.
V.GND.
V.GND.
D.V.OUT
D.V.IN
V.GND.
DECODER
E2.V.IN
PJ5
R15 75
V.GND.
E2.L.IN
PJ6
R16 330
C21 100P
C22 100P
A.GND
PJ7
C23 100P
C24 100P
R17 330
E2.R.IN
AV2
L
PJ1
R1 330
C1 100P
C2 100P
LINE OUT
C3 100P
C4 100P
R
PJ2
R2 330
C5 100P
C6 100P
C7 100P
C8 100P
C9 100P
C10 100P
C11 100P
C12 100P
R3 330
R4 330
R5 330
R6 330
R8 75
R13 75
R14 75
C13 100P
C14 100P
C15 100P
C16 100P
R9 330
R10 330
R11 330
R12 330
C17 100P
C18 100P
C19 100P
C20 100P
JS6
JS5
TO MAIN PCB 3/3 WP2
P112
2 GND.
1 MOD.V.
WF102
E2.V.IN 11
V.GND. 10
E1.V.OUT 9
V.GND. 8
E.1.V.IN 7
TV.CTL.12 6
D.V.OUT 5
V.GND. 4
D.V.IN 3
V.GND. 2
D.CTL.12 1
P101
11 E2.V.IN
10 V.GND.
9 E1.V.OUT
8 V.GND.
7 E.1.V.IN
6 TV.CTL.12
5 D.V.OUT
4 V.GND.
3 D.V.IN
2 V.GND.
1 D.CTL.12
WF103
D.L.IN 11
A.GND. 10
D.R.IN 9
A.GND. 8
D.R.OUT 7
A.GND. 6
D.L.OUT 5
A.GND. 4
E1.L.IN 3
A.GND. 2
E1.R.IN 1
P102
11 D.L.IN
10 A.GND.
9 D.R.IN
8 A.GND.
7 D.R.OUT
6 A.GND.
5 D.L.OUT
4 A.GND.
3 E1.L.IN
2 A.GND.
1 E1.R.IN
TO MAIN PCB 3/3 WP3
P113
2 GND.
1 MOD.A.
WF104
E1.R.OUT 11
A.GND. 10
E1.L.OUT 9
A.GND. 8
E2.L.IN 7
A.GND. 6
L.OUT 5
A.GND. 4
E2.R.IN 3
A.GND. 2
R.OUT 1
P103
11 E1.R.OUT
10 A.GND.
9 E1.L.OUT
8 A.GND.
7 E2.L.IN
6 A.GND.
5 L.OUT
4 A.GND.
3 E2.R.IN
2 A.GND.
1 R.OUT
C110 47/6.3
IC108 MM
1.9V
6dB
N.C
0V
R188 910
C107 470/6.3
R125 75
R191 470
D106 HZS11C3
R194 1K
C185 47/16
R102 100K
C101 10/16
6.6V
R126 300
R101 300K
R103 150K
R105 300K
R107 150K
C102 10/16
R127 300
R106 100K
C172 10/16
C173 10/16
C103 10/16
R110 100K
6.9V
R128 300
R109 300K
R111 150K
R113 300K
R115 150K
C104 10/16
R129 300
R114 100K
6.9V
C174 10/16
C175 10/16
C176
C177
C105 10/16
R118 100K
6.6V
R130 300
R117 300K
R119 150K
R121 300K
R123 150K
R131 300
C106 10/16
R122 100K
6.5V
SW.2
SW.3
SW.5
12.2V
12.2V
R192 100K
TR136
0V
DTA144TS
TR135 DTC114WS
0V
0V
2.5V
R193 51K
(TV/VCR)
D.CTL.12V
R172 22K
11.4V
TR130
0.8
DTC144ES
D103
D104
0.2V
11.3V
2.2V
TR128 DTA144TS
2.2V
0V
2.2V
TR129 DTA144TS
12.2V
12.2V

CANAL PLUS (B) PCB V1154B512B

B (POWER SUPPLY) LINE
AUDIO OUT SIGNAL LINE
AUDIO IN SIGNAL LINE
VIDEO OUT SIGNAL LINE
VIDEO IN SIGNAL LINE

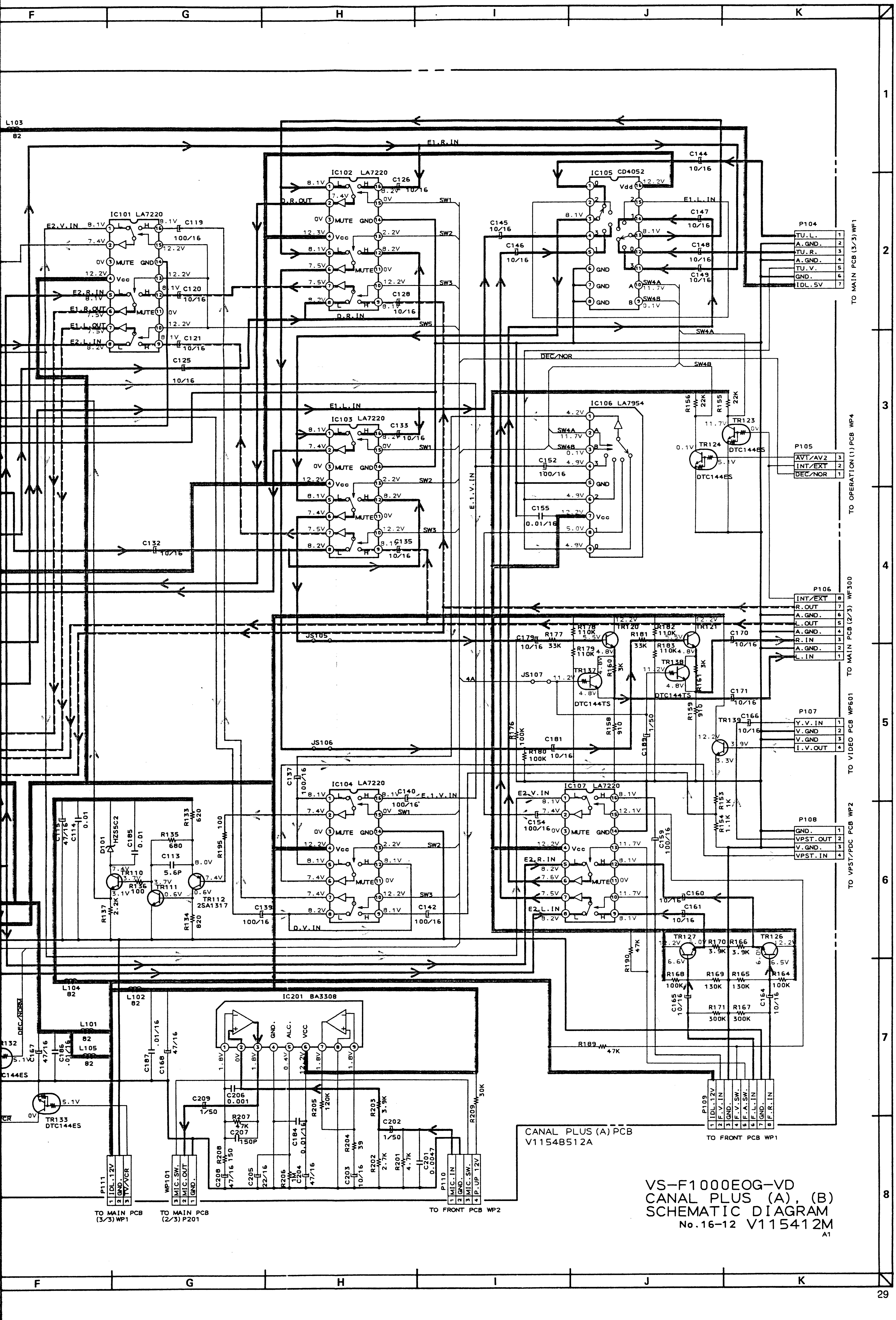
NOTE:
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN µF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN µF/WV
ALL INDUCTORS IN µH
ALL DIODES ARE 1SS131T
ALL NPN TRANSISTORS 2SC3330 (S.T.U)
INDICATED VOLTAGES WERE MEASURED
DURING E-E (STOP) MODE.
(INPUT: AV2-FRONT)


D
E
F
G
H
I
TO MAIN PCB 3/3 WP2
P112
GND.
MOD.V.
IC108 MM1031
6dB
N.C.
R188 910K
C108 1/50
C107 470/6.3
R125 75
C110 47/6.3
C109 0.01/16
L103 82
IC101 LA7220
E2.V.IN
E2.R.IN
E1.R.OUT
E1.L.OUT
E2.L.IN
MUTE
GND
Vcc
C119 100/16
C120 10/16
C121 10/16
C125 10/16
C116 100/16
IC102 LA7220
D.R.OUT
D.R.IN
E1.R.IN
C126 10/16
C128 10/16
SW1
SW2
SW3
SW5
IC103 LA7220
E1.L.IN
C133 10/16
C135 10/16
C132 10/16
E.1.V.IN
IC104 LA7220
C140 100/16
C137 100/16
C139 100/16
C142 10/16
D.V.IN
IC105
C145 10/16
C146 10/16
GND
IC106
SW4A
SW4B
C152 100/16
C155 0.01/16
Vcc
DEC/NOR
IC107 LA7220
C154 100/16
JS105
JS106
JS107
R177 33K
R178 110K
R179 110K
TR137 DTC144TS
R176 100K
R180 100K
R158 910
C181 10/16
C179 10/16
WF102
P101
E2.V.IN
V.GND.
E1.V.OUT
E.1.V.IN
TV.CTL.12
D.V.OUT
D.V.IN
D.CTL.12
R191 470
D106 HZS11C3
R194 1K
D.CTL.12V
WF103
P102
D.L.IN
A.GND.
D.R.IN
D.R.OUT
D.L.OUT
E1.L.IN
E1.R.IN
TO MAIN PCB 3/3 WP3
P113
MOD.A.
WF104
P103
E1.R.OUT
E1.L.OUT
E2.L.IN
L.OUT
E2.R.IN
R.OUT
C185 47/16
TR101
TR102
TR103
TR104
TR105
TR106
C101 10/16
C102 10/16
C103 10/16
C104 10/16
C105 10/16
C106 10/16
C172 10/16
C173 10/16
C174 10/16
C175 10/16
C176 10/16
C177 10/16
C117 10/16
C118 10/16
R101 300K
R103 150K
R126 300
R104 3K
R127 300
R128 300
R129 300
R130 300
R131 300
C115 47/16
C114 0.01
D101 HZS5C2
C185 0.01
R135 680
C113 5.6P
R133 620
R195 100
TR110
TR111
R136 100
R137 2.2K
TR112 2SA1317
R134 820
R192 100K
TR136 DTA144TS
TR135 DTC114WS
TV/VCR
R193 51K
D.CTL.12V
R172 22K
R173 22K
R174 22K
TR130 DTC144ES
D105
DEC/NORM
TR132 DTC144ES
D103
D104
TR128 DTA144TS
TR129 DTA144TS
TR131 DTA144TS
TR133 DTC144ES
TV/VCR
L104 82
L102 82
L101 82
L105 82
C167 47/16
C186 .01/16
C187 .01/16
C168 47/16
IC201 BA3308
ALC.
VCC
C206 0.001
C209 1/50
R207 47K
C207 150P
R208 150
C208 47/16
C205 22/16
R206 1M
C184 0.01/16
C204 47/16
R205 120K
R204 39
C203 10/16
R203 3.9K
C202 1/50
R202 2.7K
R201 4.7K
C201 0.0047
R209 30K
R189 47K
P111
DL.12V
GND.
TV/VCR
WP101
MIC.SW.
MIC.OUT
GND.
P110
MIC.IN
GND.
MIC.SW.
P.UP 12V
TO MAIN PCB (3/3) WP1
TO MAIN PCB (2/3) P201
TO FRONT PCB WP2

SPECIFIED
OHMS
μF (P=PF)
CAPACITORS IN μF/WV
μH
S131T
RS 2SC3330 (S.T.U)

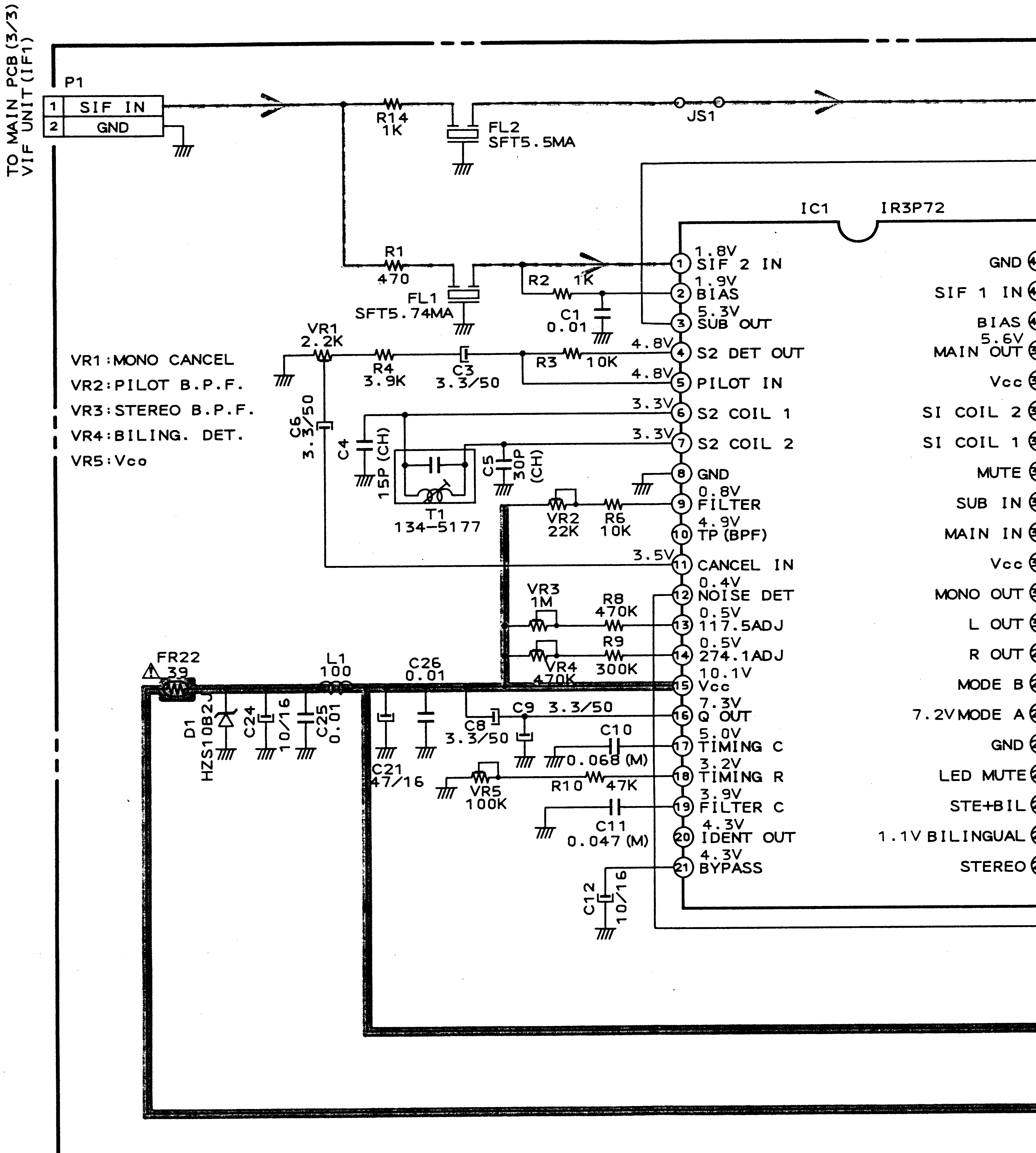
S WERE MEASURED
ODE.

CANAL PLUS (A) PC
V1154B512A


F
G
H
I
J
K
1
2
3
4
5
6
7
8
L103
82
IC101 LA7220
IC102 LA7220
IC103 LA7220
IC104 LA7220
IC105 CD4052
IC106 LA7954
IC107 LA7220
IC201 BA3308
E1.R.IN
E1.L.IN
E2.V.IN
E2.R.IN
E2.L.IN
E1.R.OUT
E1.L.OUT
D.R.OUT
D.R.IN
D.V.IN
E.1.V.IN
SW1
SW2
SW3
SW4A
SW4B
SW5
DEC/NOR
MUTE
GND
Vcc
Vdd
JS105
JS106
JS107
P104
TU.L.
A.GND.
TU.R.
A.GND.
TU.V.
GND.
IDL.5V
TO MAIN PCB (3/3) WF1
P105
AVT/AV2
INT/EXT
DEC/NOR
TO OPERATION (1) PCB WP4
P106
INT/EXT
R.OUT
A.GND.
L.OUT
A.GND.
R.IN
A.GND.
L.IN
TO MAIN PCB (2/3) WF300
P107
Y.V.IN
V.GND
V.GND
I.V.OUT
TO VIDEO PCB WP601
P108
GND.
VPST.OUT
V.GND.
VPST.IN
TO VPST/PDC PCB WP2
P109
IDL.12V
F.V.IN
GND.
F.V.SW.
F.A.SW.
F.L.IN
GND.
F.R.IN
TO FRONT PCB WP1
P110
MIC.IN
MIC.GND
MIC.SW.
P.UP 12V
TO FRONT PCB WP2
P111
IDL.12V
GND.
TV/VCR
TO MAIN PCB (3/3) WP1
WP101
MIC.SW.
MIC.OUT
GND.
TO MAIN PCB (2/3) P201
TR110
TR111
TR112 2SA1317
TR120
TR121
TR123 DTC144ES
TR124 DTC144ES
TR126
TR127
TR133 DTC144ES
TR137 DTC144TS
TR138 DTC144TS
TR139
D101 HZS5C2
L101 82
L102 82
L104 82
L105 82

CANAL PLUS (A) PCB
V1154B512A

VS-F1000EOG-VD
CANAL PLUS (A), (B)
SCHEMATIC DIAGRAM
No.16-12 V115412M
A1


TO MAIN PCB (3/3)
VIF UNIT (IF1)
P1
1 SIF IN
2 GND
R14 1K
FL2 SFT5.5MA
JS1
IC1 IR3P72
R1 470
FL1 SFT5.74MA
R2 1K
C1 0.01
VR1 2.2K
R4 3.9K
C3 3.3/50
R3 10K
C6 3.3/50
C4 15P (CH)
C5 30P (CH)
T1 134-5177
VR2 22K
R6 10K
VR3 1M
R8 470K
R9 300K
VR4 470K
FR22 39
L1 100
C26 0.01
D1 HZS10B2J
C24 10/16
C25 0.01
C21 47/16
C9 3.3/50
C8 3.3/50
C10 0.068 (M)
VR5 100K
R10 47K
C11 0.047 (M)
C12 10/16
VR1 : MONO CANCEL
VR2 : PILOT B.P.F.
VR3 : STEREO B.P.F.
VR4 : BILING. DET.
VR5 : Vco
1.8V ① SIF 2 IN
1.9V ② BIAS
5.3V ③ SUB OUT
4.8V ④ S2 DET OUT
4.8V ⑤ PILOT IN
3.3V ⑥ S2 COIL 1
3.3V ⑦ S2 COIL 2
⑧ GND
0.8V ⑨ FILTER
4.9V ⑩ TP (BPF)
3.5V ⑪ CANCEL IN
0.4V ⑫ NOISE DET
0.5V ⑬ 117.5ADJ
0.5V ⑭ 274.1ADJ
10.1V ⑮ Vcc
7.3V ⑯ Q OUT
5.0V ⑰ TIMING C
3.2V ⑱ TIMING R
3.9V ⑲ FILTER C
4.3V ⑳ IDENT OUT
4.3V ㉑ BYPASS
GND
SIF 1 IN
BIAS
5.6V MAIN OUT
Vcc
SI COIL 2
SI COIL 1
MUTE
SUB IN
MAIN IN
Vcc
MONO OUT
L OUT
R OUT
MODE B
7.2V MODE A
GND
LED MUTE
STE+BIL
1.1V BILINGUAL
STEREO

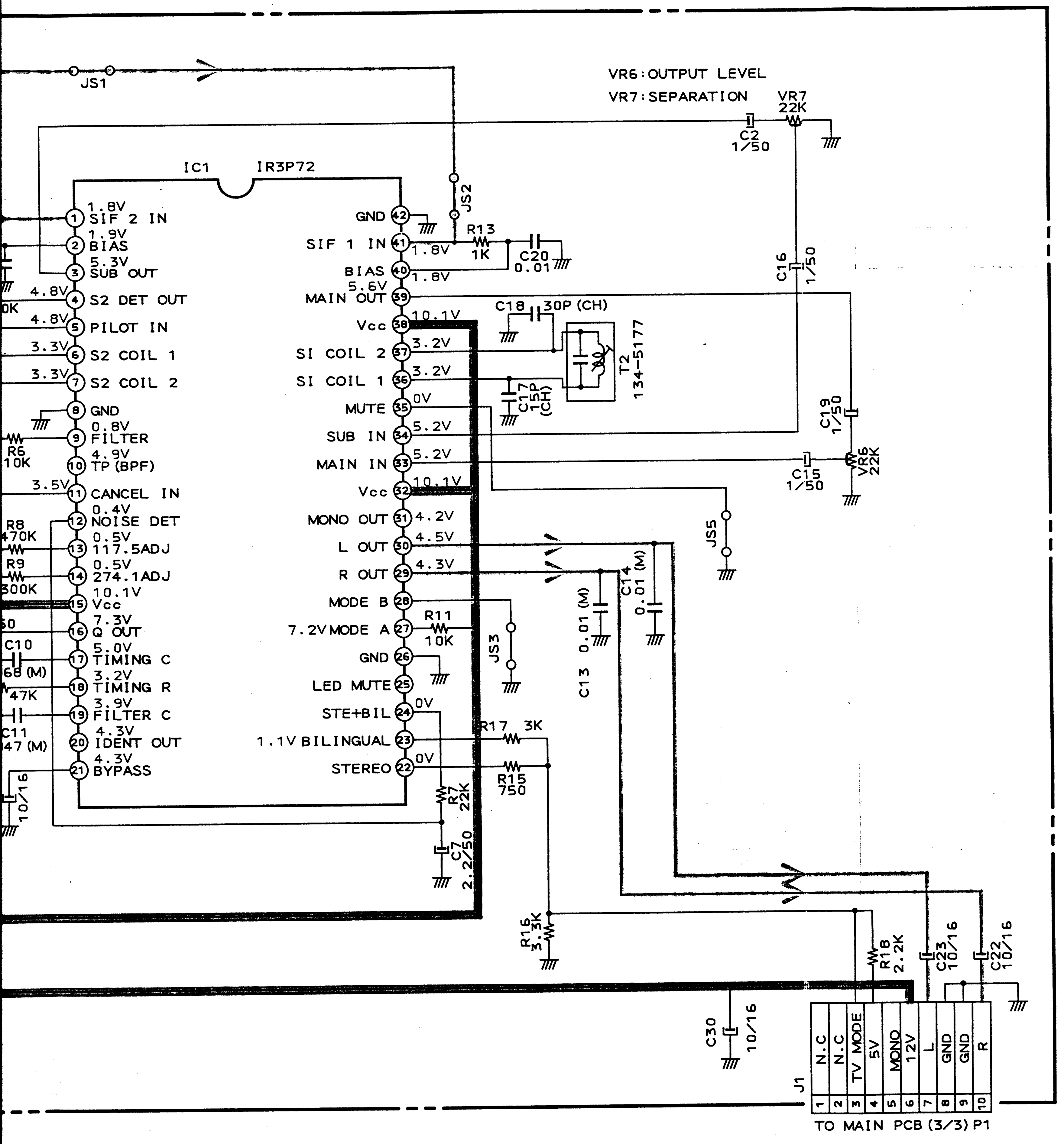
D-MULTI PCB V1154C5090

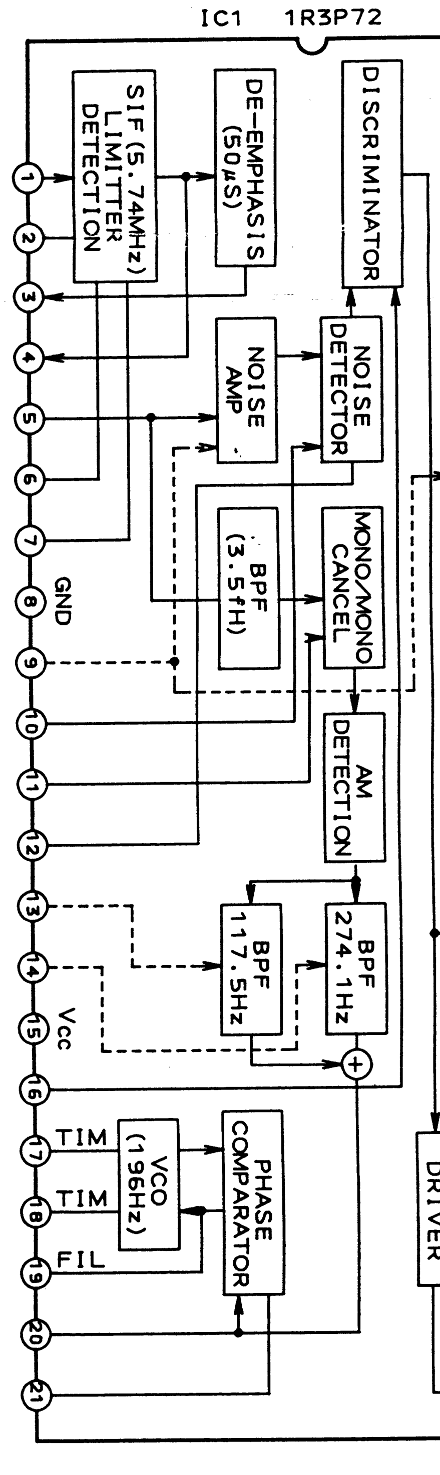
WARNING: ⚠ AND ■ INDICATE SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY. REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSMENT: ⚠ ET ■, ILS INDIQUENT LES COMPOSTANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L' APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT

NOTE;
UNLESS OTHERWIS
ALL RESISTORS I
ALL CAPACITORS
ALL ELECTROLYTI
ALL INDUCTORS I

INDICATED VOLTA
E-E STEREO MODE


JS1
VR6:OUTPUT LEVEL
VR7:SEPARATION
VR7 22K
C2 1/50
IC1 IR3P72
1.8V ① SIF 2 IN
1.9V ② BIAS
5.3V ③ SUB OUT
4.8V ④ S2 DET OUT
4.8V ⑤ PILOT IN
3.3V ⑥ S2 COIL 1
3.3V ⑦ S2 COIL 2
⑧ GND
0.8V ⑨ FILTER
R6 10K
4.9V ⑩ TP (BPF)
3.5V ⑪ CANCEL IN
0.4V ⑫ NOISE DET
R8 470K
0.5V ⑬ 117.5ADJ
R9 300K
0.5V ⑭ 274.1ADJ
10.1V ⑮ Vcc
7.3V ⑯ Q OUT
C10
5.0V ⑰ TIMING C
68 (M)
3.2V ⑱ TIMING R
47K
3.9V ⑲ FILTER C
C11 47 (M)
4.3V ⑳ IDENT OUT
4.3V ㉑ BYPASS
10/16
GND ㊷
SIF 1 IN ㊶ 1.8V
BIAS ㊵ 1.8V
5.6V MAIN OUT ㊴
Vcc ㊳ 10.1V
SI COIL 2 ㊲ 3.2V
SI COIL 1 ㊱ 3.2V
MUTE ㉟ 0V
SUB IN ㉞ 5.2V
MAIN IN ㉝ 5.2V
Vcc ㉜ 10.1V
MONO OUT ㉛ 4.2V
L OUT ㉚ 4.5V
R OUT ㉙ 4.3V
MODE B ㉘
7.2V MODE A ㉗
GND ㉖
LED MUTE ㉕
STE+BIL ㉔ 0V
1.1V BILINGUAL ㉓
STEREO ㉒ 0V
JS2
R13 1K
C20 0.01
C16 1/50
C18 30P (CH)
T2 134-5177
C17 15P (CH)
C19 1/50
VR6 22K
C15 1/50
JS5
C14 0.01 (M)
C13 0.01 (M)
R11 10K
JS3
R17 3K
R15 750
R7 22K
C7 2.2/50
R16 3.3K
R18 2.2K
C23 10/16
C22 10/16
C30 10/16
J1
N.C
N.C
TV MODE
5V
MONO
12V
L
GND
GND
R
1 2 3 4 5 6 7 8 9 10
TO MAIN PCB (3/3) P1


IC1 1R3P72
SIF (5.74MHz) LIMITTER DETECTION
DE-EMPHASIS (50µS)
DISCRIMINATOR
NOISE AMP
NOISE DETECTOR
BPF (3.5fH)
MONO/MONO CANCEL
AM DETECTION
BPF 117.5Hz
BPF 274.1Hz
VCO (196Hz)
PHASE COMPARATOR
DRIVER
GND
Vcc
TIM
TIM
FIL
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

TY CRITICAL
D SAFETY,
COMPONENTS
S RECOMMENDED

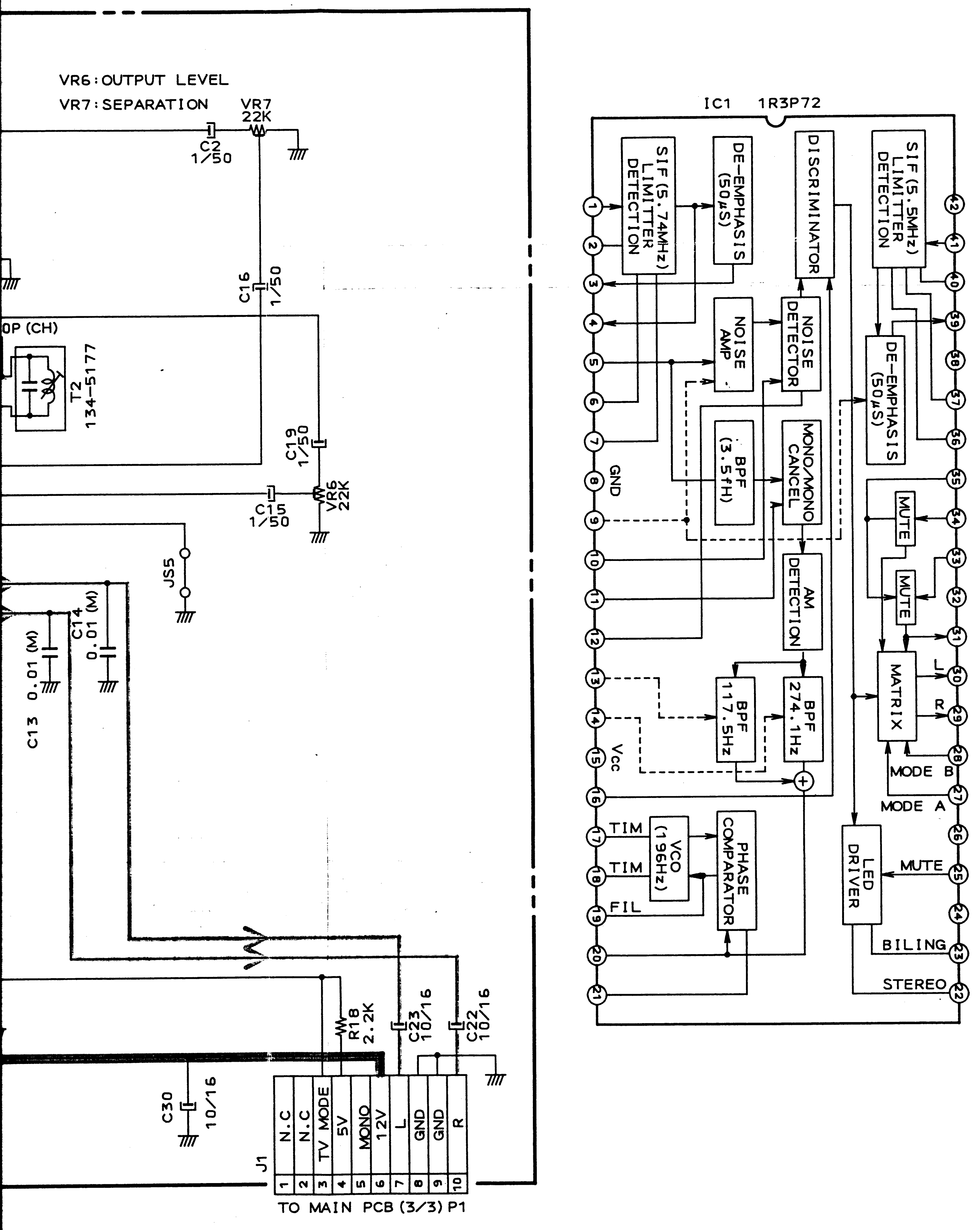
IQUENT LES
E SÉCURITÉ,
DE SÉCURITÉ
CER QUE DES
LE FABRICANT

NOTE;
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/6W (J)
ALL CAPACITORS IN µF (P=PF)
ALL ELECTROLYTIC CAPACITORS IN µF/WV
ALL INDUCTORS IN µH (K)

INDICATED VOLTAGES WERE MEASURED DURING
E-E STEREO MODE

━━━━ B (POWER SUPPLY) LINE
— — — — SIF SIGNAL LINE
———— AUDIO OUT SIGNAL LINE

VS-F1000EO
VS-F1010EOH
D-MULTI
SCHEMATIC D
No.16-13 V


VR6: OUTPUT LEVEL
VR7: SEPARATION
VR7
22K
C2
1/50
C16
1/50
OP (CH)
T2
134-5177
C19
1/50
C15
1/50
VR6
22K
JS5
C13 0.01 (M)
C14
0.01 (M)
R18
2.2K
C23
10/16
C22
10/16
C30
10/16
J1
N.C
N.C
TV MODE
5V
MONO
12V
L
GND
GND
R
1
2
3
4
5
6
7
8
9
10
TO MAIN PCB (3/3) P1
IC1 1R3P72
SIF (5.74MHz) LIMITTER DETECTION
DE-EMPHASIS (50μS)
DISCRIMINATOR
SIF (5.5MHz) LIMITTER DETECTION
NOISE AMP
NOISE DETECTOR
DE-EMPHASIS (50μS)
BPF (3.5fH)
MONO/MONO CANCEL
MUTE
MUTE
AM DETECTION
MATRIX
L
R
BPF 117.5Hz
BPF 274.1Hz
MODE B
MODE A
VCO (196Hz)
PHASE COMPARATOR
LED DRIVER
MUTE
TIM
TIM
FIL
GND
Vcc
BILING
STEREO
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42

μF/WV

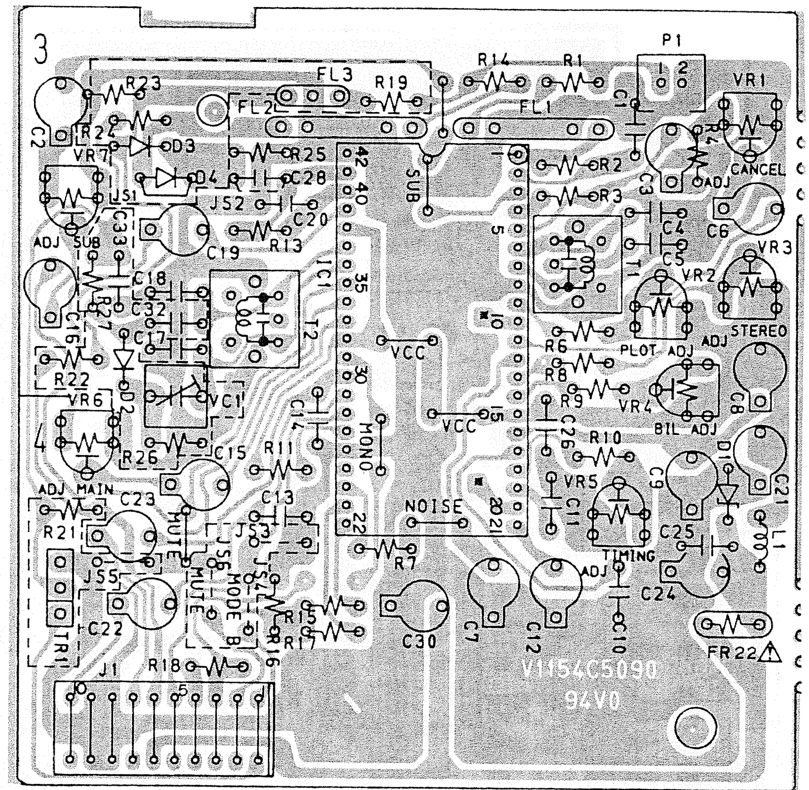
ED DURING

B (POWER SUPPLY) LINE

SIF SIGNAL LINE

AUDIO OUT SIGNAL LINE

VS-F1000EOG-VD
VS-F1010EOH-D
D-MULTI
SCHEMATIC DIAGRAM
No.16-13 V115413M
A2



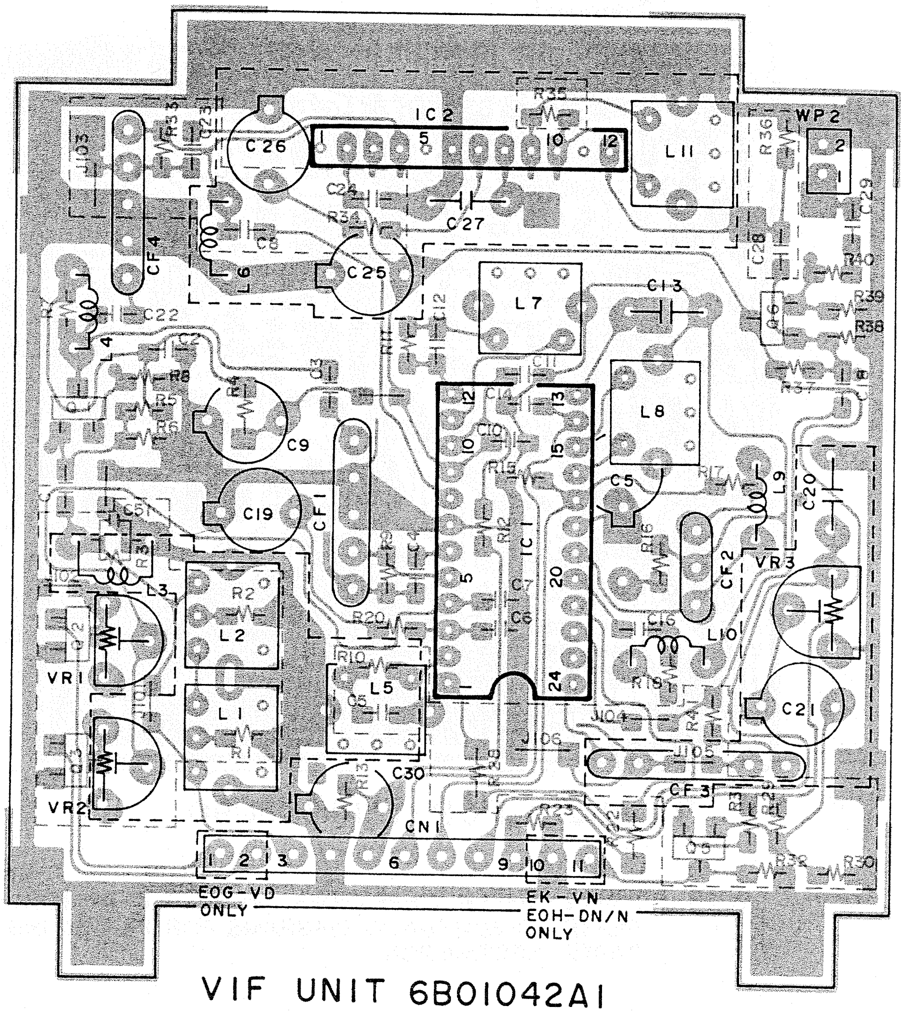
3
4
P1
VR1
CANCEL
ADJ
VR2
VR3
STEREO
PLOT ADJ
VR4
BIL ADJ
VR5
TIMING
VR6
VR7
ADJ SUB
ADJ MAIN
FL1
FL2
FL3
IC1
T1
T2
VC1
SUB
VCC
MONO
NOISE
MUTE
MODE B
J1
TR1
L1
FR22
V1154C5090
94V0

D-MULTI PCB V1154C5090

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING PARTS INFORMATION.

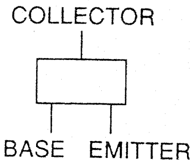
WARNING: ⚠INDICATES SAFETY CRITICAL COMPONENTS FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURER'S RECOMMENDED PARTS

AVERTISSEMENT: ⚠IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉ DE L'APPAREIL, NE REMPLACER QUE DES PIÈCES RECOMMANDEES PAR LE FABRICANT



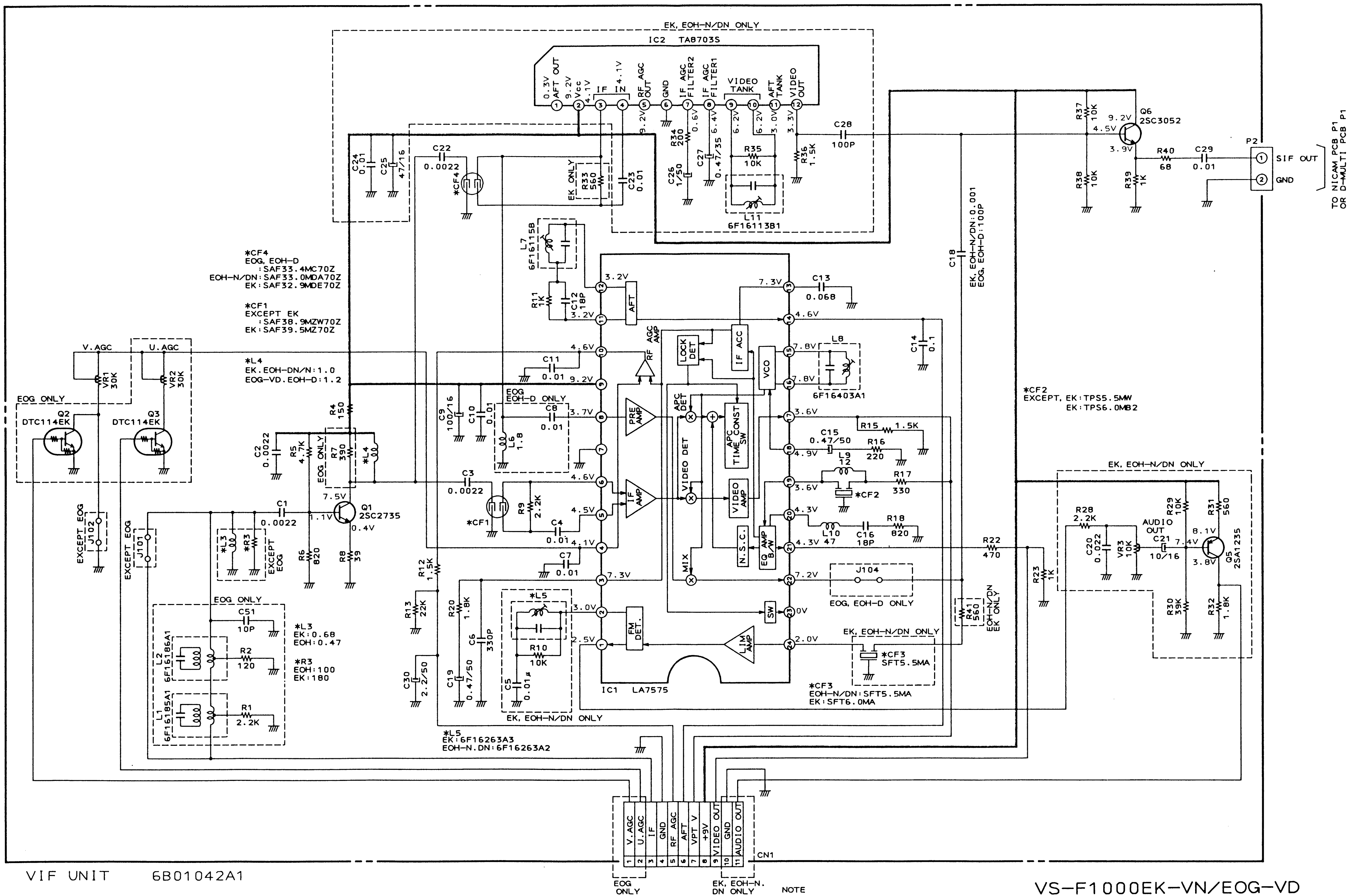
IC2
5
10
12
C26
L11
WP2
2
1
R36
R35
R33
C23
J103
CF4
C24
R34
C27
C8
C25
C29
C28
R40
R39
R38
Q6
R37
C18
C13
L7
C12
R11
C11
C22
C2
R8
R5
R6
R4
C3
C9
C14
C10
R15
12
13
10
15
L8
C5
R17
L9
C20
C19
CF1
C4
R12
IC1
5
20
C7
C6
24
R16
CF2
VR3
C51
R3
L3
R2
L2
R20
R10
L5
C5
C16
L10
R19
C21
VR1
L1
R1
J104
R41
VR2
R13
C30
J106
J105
CF3
CN1
R23
R22
R32
R30
Q5
1
2
3
6
9
10
11
EOG-VD ONLY
EK-VN
EOH-DN/N
ONLY

VIF UNIT 6B01042A1



COLLECTOR
BASE
EMITTER

NOTE : PARTS DIFFER DEPENDING ON MODEL NUMBER.
REFER TO SCHEMATIC DIAGRAMS FOR PERTAINING
PARTS INFORMATION.


EK, EOH-N/DN ONLY
IC2 TA8703S
0.3V AFT OUT
9.2V Vcc
4.1V IF IN 4.1V
RF AGC OUT
GND
IF AGC FILTER2
IF AGC FILTER1
VIDEO TANK
AFT TANK
VIDEO OUT
C24 0.01
C25 47/16
C22 0.0022
*CF4
EK ONLY R33 560
C23 0.01
R34 200
C26 1/50
C27 0.47/35
R35 10K
R36 1.5K
L11 6F16113B1
C28 100P
R37 10K
9.2V
Q6 2SC3052
4.5V
3.9V
R40 68
C29 0.01
P2
SIF OUT
GND
TO NICAM PCB P1 OR D-MULTI PCB P2
R38 10K
R39 1K
C18 EK, EOH-N/DN:0.001 EOG, EOH-D:100P
L7 6F16115B
R11 1K
C12 18P
3.2V
AFT
7.3V
C13 0.068
4.6V
C14 0.1
*CF4
EOG, EOH-D :SAF33.4MC70Z
EOH-N/DN:SAF33.0MDA70Z
EK:SAF32.9MDE70Z
*CF1
EXCEPT EK :SAF38.9MZW70Z
EK:SAF39.5MZ70Z
*L4
EK.EOH-DN/N:1.0
EOG-VD.EOH-D:1.2
V.AGC
U.AGC
VR1 30K
VR2 30K
EOG ONLY
Q2 DTC114EK
Q3 DTC114EK
RF AGC AMP
LOCK DET
IF ACC
VCO
L8 6F16403A1
7.8V
C11 0.01
9.2V
EOG EOH-D ONLY
C8 0.01
3.7V
PRE AMP
C9 100/16
C10 0.01
L6 1.8
APC DET
APC TIME CONST SW
3.6V
R15 1.5K
C15 0.47/50
4.9V
R16 220
L9 12
VIDEO DET
R4 150
C2 0.0022
R5 4.7K
EOG ONLY R7 390
*L4
C3 0.0022
R9 2.2K
4.6V
IF AMP
VIDEO AMP
R17 330
*CF2
*CF2
EXCEPT, EK:TPS5.5MW
EK:TPS6.0MB2
7.5V
C1 0.0022
1.1V
Q1 2SC2735
0.4V
*CF1
C4 0.01
4.5V
4.1V
4.3V
L10 47
C16 18P
R18 820
N.S.C.
EQ AMP B/W
R22 470
EK, EOH-N/DN ONLY
R28 2.2K
R29 10K
R31 560
AUDIO OUT
C20 0.022
VR3 10K
C21 10/16
7.4V
8.1V
3.8V
Q5 2SA1235
R23 1K
EXCEPT EOG J102
EXCEPT EOG J101
*L3
*R3
EXCEPT EOG
R6 820
R8 39
R12 1.5K
C7 0.01
7.3V
MIX
7.2V
J104
EOG, EOH-D ONLY
R41 560
EOH-N/DN EK ONLY
R30 39K
R32 1.8K
EOG ONLY
C51 10P
*L3
EK:0.68
EOH:0.47
*R3
EOH:100
EK:180
L2 6F16186A1
R2 120
L1 6F16185A1
R1 2.2K
R13 22K
R20 1.8K
C6 330P
*L5
3.0V
R10 10K
2.5V
FM DET.
SW
0V
LIM AMP
2.0V
EK, EOH-N/DN ONLY
*CF3 SFT5.5MA
*CF3
EOH-N/DN:SFT5.5MA
EK:SFT6.0MA
C30 2.2/50
C19 0.47/50
C5 0.01μ
IC1 LA7575
EK, EOH-N/DN ONLY
*L5
EK:6F16263A3
EOH-N.DN:6F16263A2
V.AGC
U.AGC
IF
GND
RF AGC
AFT
VPT V
+9V
VIDEO OUT
GND
AUDIO OUT
CN1
EOG ONLY
EK, EOH-N. DN ONLY
A B C D E F G H I J K
1 2 3 4 5 6 7 8

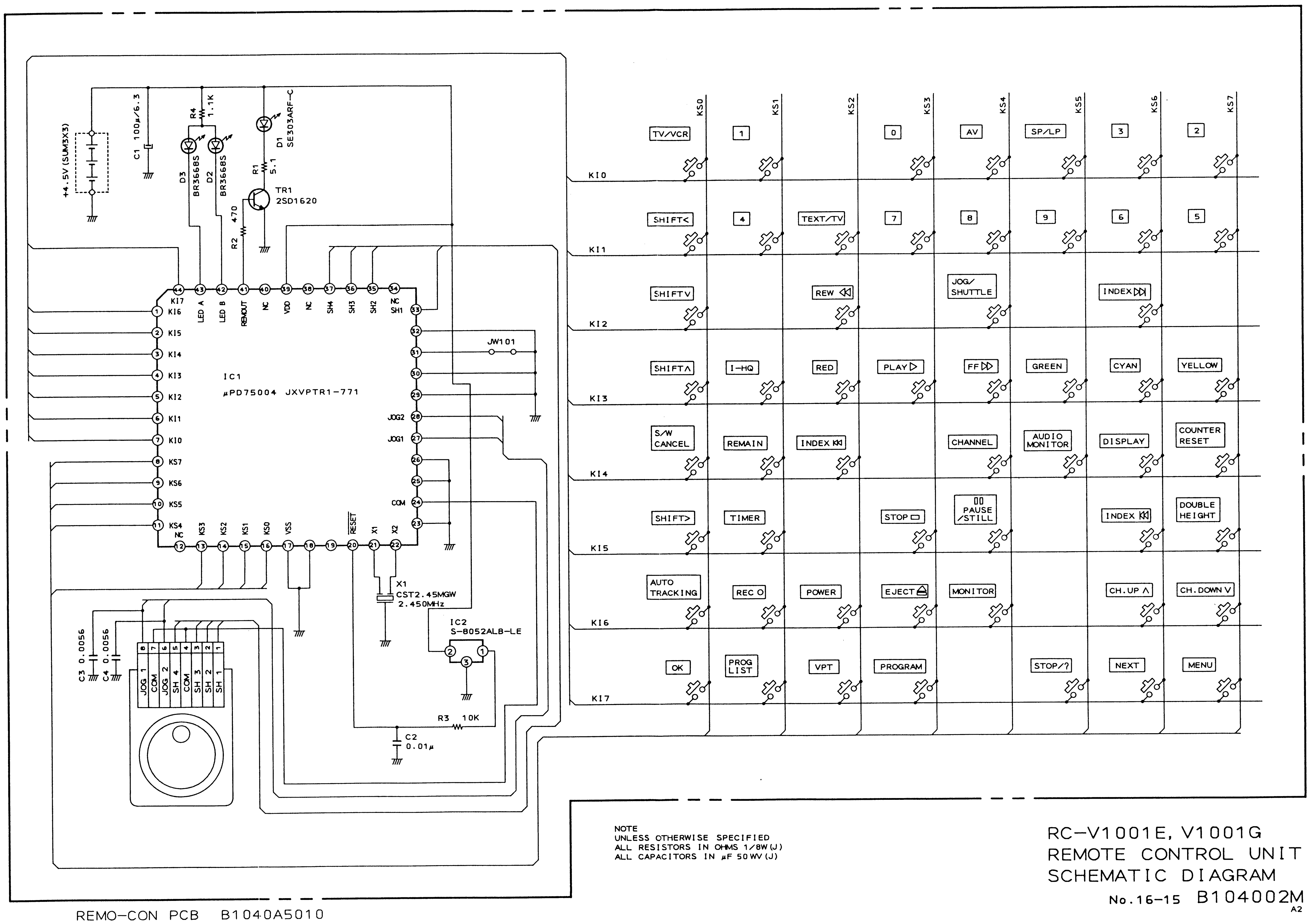
VIF UNIT 6B01042A1

——— :POWER SUPPLY LINE

INDICATED VOLTAGES WERE MEASURED
DURING E-E (STOP) MODE.
(WHEN A STATION IS BEING RECEIVED)

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS
ALL CAPACITORS IN μF
ALL INDUCTORS IN μH
ALL DIODES ARE 1SS131T

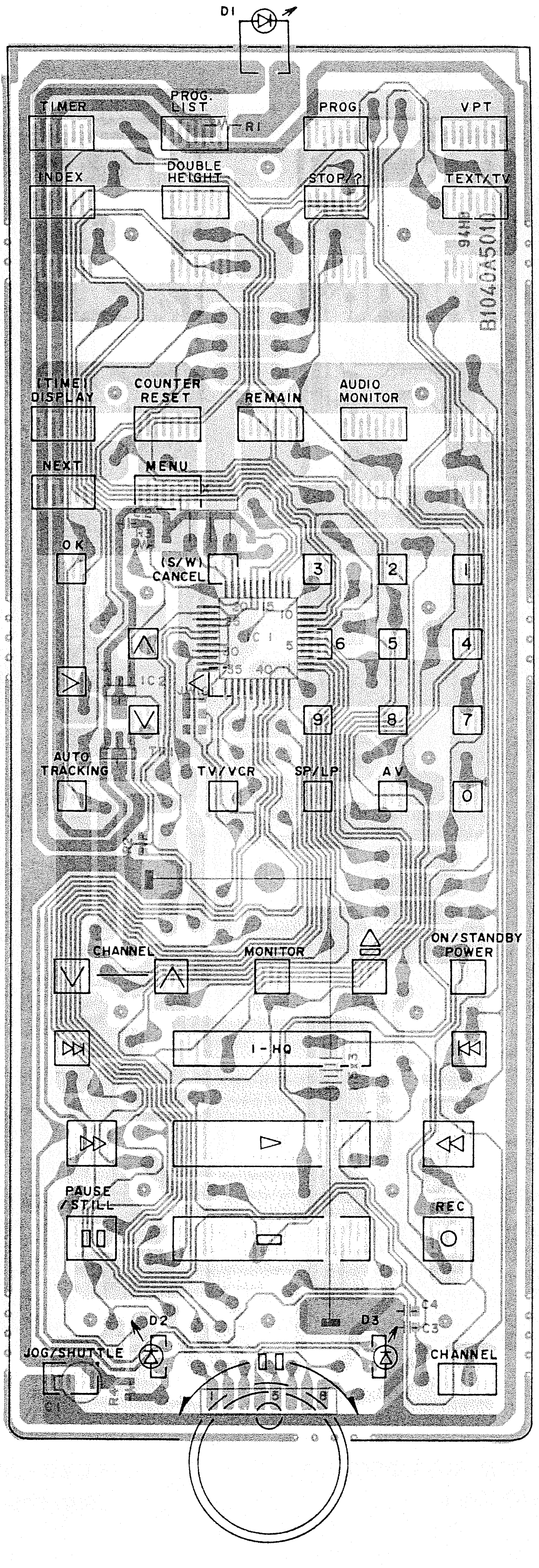
VS-F1000EK-VN/EOG-VD
VS-F1010EOH-D/EOH-N
VS-F1030EOH-DN
VIF UNIT
SCHEMATIC DIAGRAM
No.16-14 V115414M
A2


+4.5V (SUM3X3)
C1 100μ/6.3
R4 1.1K
D3 BR3668S
D2 BR3668S
D1 SE303ARF-C
R1 5.1
TR1 2SD1620
R2 470
IC1
μPD75004 JXVPTR1-771
KI7
KI6
KI5
KI4
KI3
KI2
KI1
KI0
KS7
KS6
KS5
KS4
NC
KS3
KS2
KS1
KS0
VSS
RESET
X1
X2
LED A
LED B
REMOUT
NC
VDD
NC
SH4
SH3
SH2
NC
SH1
JW101
JOG2
JOG1
COM
X1
CST2.45MGW
2.450MHz
IC2
S-8052ALB-LE
R3 10K
C2 0.01μ
C3 0.0056
C4 0.0056
JOG 1
COM
JOG 2
SH 4
COM
SH 3
SH 2
SH 1
KS0
KS1
KS2
KS3
KS4
KS5
KS6
KS7
TV/VCR
1
0
AV
SP/LP
3
2
SHIFT<
4
TEXT/TV
7
8
9
6
5
SHIFTV
REW ◁◁
JOG/SHUTTLE
INDEX ▷▷|
SHIFTΛ
I-HQ
RED
PLAY ▷
FF ▷▷
GREEN
CYAN
YELLOW
S/W CANCEL
REMAIN
INDEX |◁◁
CHANNEL
AUDIO MONITOR
DISPLAY
COUNTER RESET
SHIFT>
TIMER
STOP ▭
▯▯ PAUSE /STILL
INDEX |◁◁
DOUBLE HEIGHT
AUTO TRACKING
REC ○
POWER
EJECT ⏏
MONITOR
CH.UP Λ
CH.DOWN V
OK
PROG LIST
VPT
PROGRAM
STOP/?
NEXT
MENU
REMO-CON PCB B1040A5010

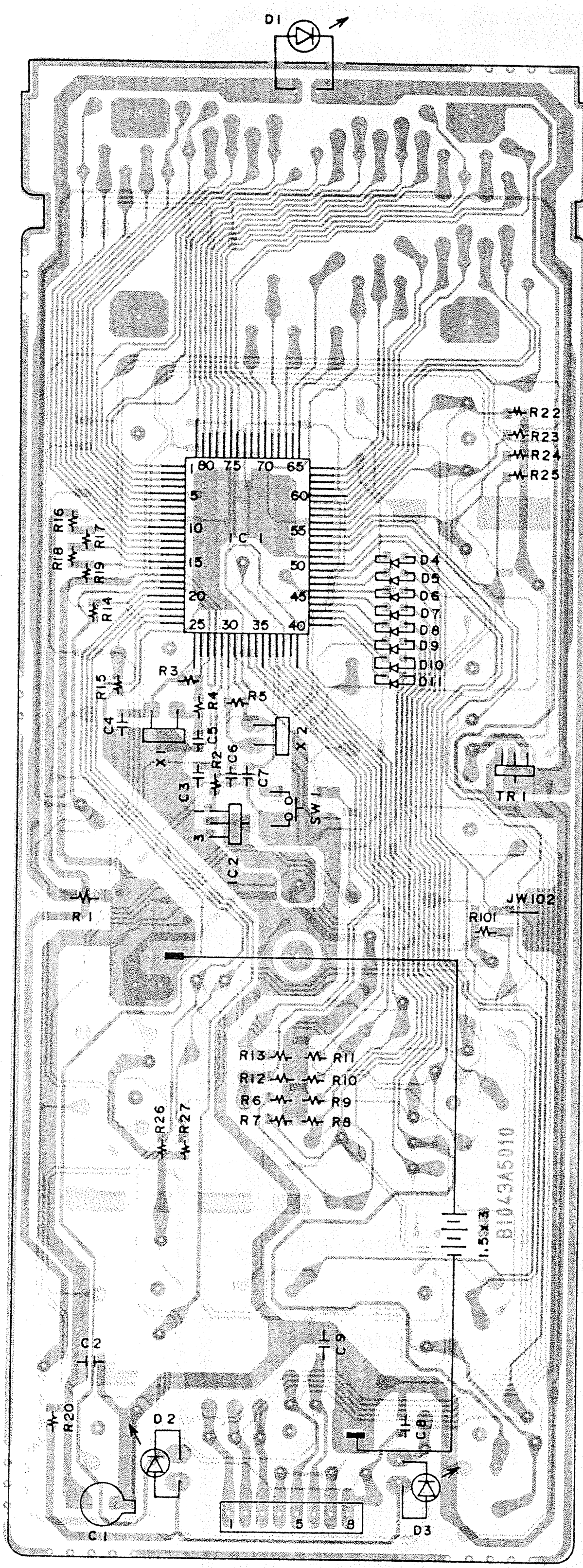
NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/8W (J)
ALL CAPACITORS IN μF 50WV (J)

RC-V1001E, V1001G
REMOTE CONTROL UNIT
SCHEMATIC DIAGRAM

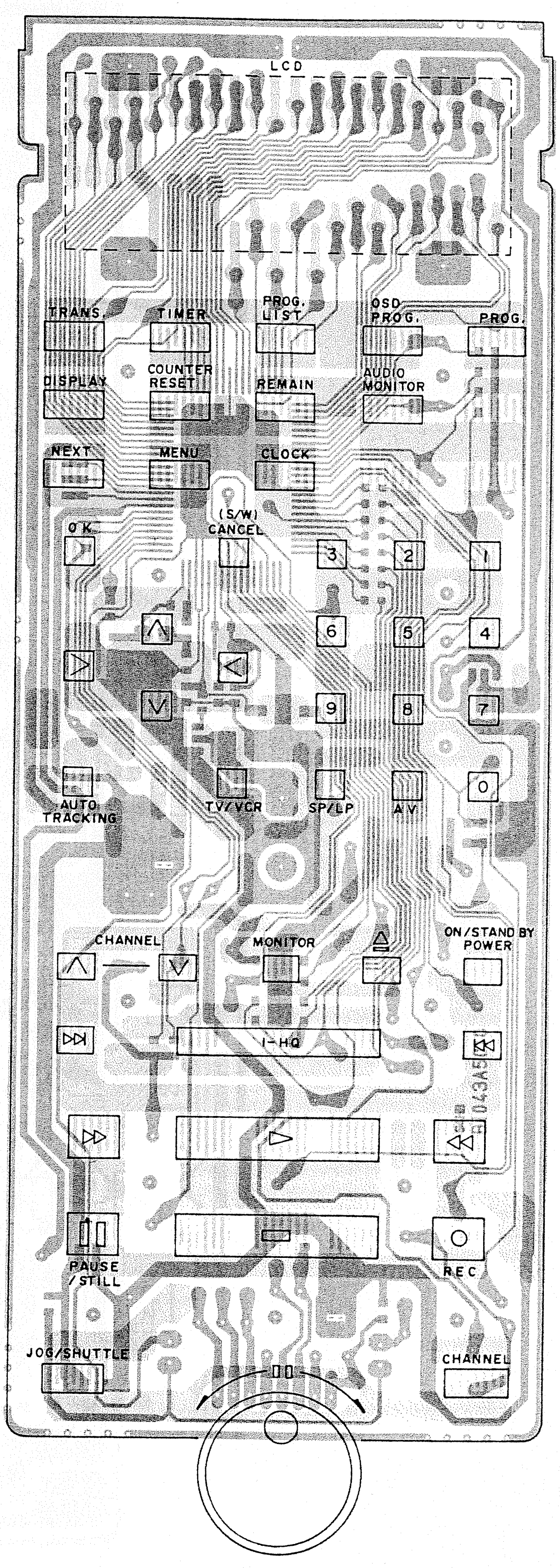
No.16-15 B104002M
A2


D1
TIMER
PROG. LIST
R1
PROG
VPT
INDEX
DOUBLE HEIGHT
STOP/?
TEXT/TV
94HB
B1040A5010
(TIME) DISPLAY
COUNTER RESET
REMAIN
AUDIO MONITOR
NEXT
MENU
OK
(S/W) CANCEL
3
2
1
IC1
6
5
4
IC2
9
8
7
AUTO TRACKING
TV/VCR
SP/LP
AV
0
CHANNEL
MONITOR
ON/STANDBY POWER
I-HQ
PAUSE /STILL
REC
D2
D3
C4
C3
JOG/SHUTTLE
CHANNEL
C1
R4
1
5
8

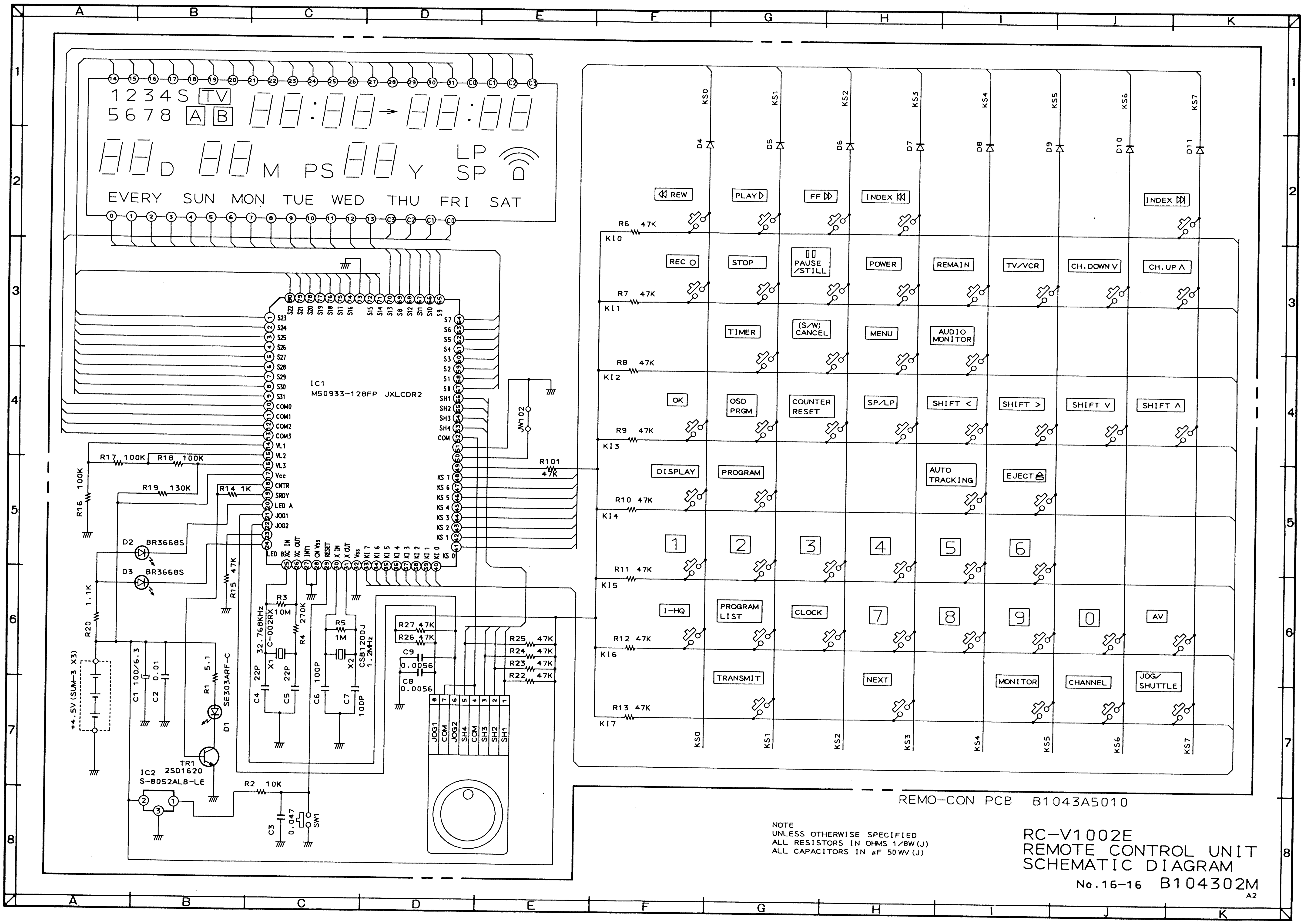
REMO-CON PCB B1040A5010


D1
R22
R23
R24
R25
1
80
75
70
65
5
60
10
55
15
IC 1
50
20
45
25
30
35
40
R16
R17
R18
R19
R14
D4
D5
D6
D7
D8
D9
D10
D11
R15
R3
R4
R5
C4
X1
C5
R2
C6
C7
X2
C3
SW1
TR1
IC2
R1
JW102
R101
R13
R11
R12
R10
R6
R9
R7
R8
R26
R27
B1043A5010
1.5×3
C2
C9
R20
D2
C8
C1
1
5
8
D3

REMO-CON PCB BI043A5010J1
(PARTS LOCATION)


LCD
TRANS.
TIMER
PROG.
LIST
OSD
PROG.
PROG.
DISPLAY
COUNTER
RESET
REMAIN
AUDIO
MONITOR
NEXT
MENU
CLOCK
(S/W)
CANCEL
OK
3
2
1
6
5
4
9
8
7
0
AUTO
TRACKING
TV/VCR
SP/LP
AV
CHANNEL
MONITOR
ON/STAND BY
POWER
I-HQ
B1043A5
PAUSE
/STILL
REC
JOG/SHUTTLE
CHANNEL

REMO-CON PCB BI043A5010J1
(SWITCH LOCATION)



A
B
C
D
E
F
G
H
I
J
K
1
2
3
4
5
6
7
8
1 2 3 4 S TV
5 6 7 8 A B
D
M
PS
Y
LP
SP
EVERY
SUN
MON
TUE
WED
THU
FRI
SAT
IC1
M50933-128FP JXLCDR2
R17 100K
R18 100K
R19 130K
R14 1K
R16 100K
R15 47K
R20 1.1K
D2 BR3668S
D3 BR3668S
R1 5.1
D1 SE303ARF-C
TR1 2SD1620
IC2 S-8052ALB-LE
C1 100/6.3
C2 0.01
+4.5V (SUM-3 X3)
R3 10M
X1 32.768KHz C-002RX
R4 270K
C4 22P
C5 22P
C6 100P
R5 1M
X2 CSB1200J 1.2MHz
C7 100P
R2 10K
C3 0.047
SW1
C9 0.0056
C8 0.0056
R27 47K
R26 47K
R25 47K
R24 47K
R23 47K
R22 47K
R101 47K
JW102
JOG1
COM
JOG2
SH4
COM
SH3
SH2
SH1
R6 47K
R7 47K
R8 47K
R9 47K
R10 47K
R11 47K
R12 47K
R13 47K
KI0
KI1
KI2
KI3
KI4
KI5
KI6
KI7
KS0
KS1
KS2
KS3
KS4
KS5
KS6
KS7
D4
D5
D6
D7
D8
D9
D10
D11
◁◁ REW
PLAY ▷
FF ▷▷
INDEX ◁◁
INDEX ▷▷
REC ○
STOP
PAUSE /STILL
POWER
REMAIN
TV/VCR
CH. DOWN V
CH. UP Λ
TIMER
(S/W) CANCEL
MENU
AUDIO MONITOR
OK
OSD PRGM
COUNTER RESET
SP/LP
SHIFT <
SHIFT >
SHIFT V
SHIFT Λ
DISPLAY
PROGRAM
AUTO TRACKING
EJECT ⏏
1
2
3
4
5
6
I-HQ
PROGRAM LIST
CLOCK
7
8
9
0
AV
TRANSMIT
NEXT
MONITOR
CHANNEL
JOG/ SHUTTLE

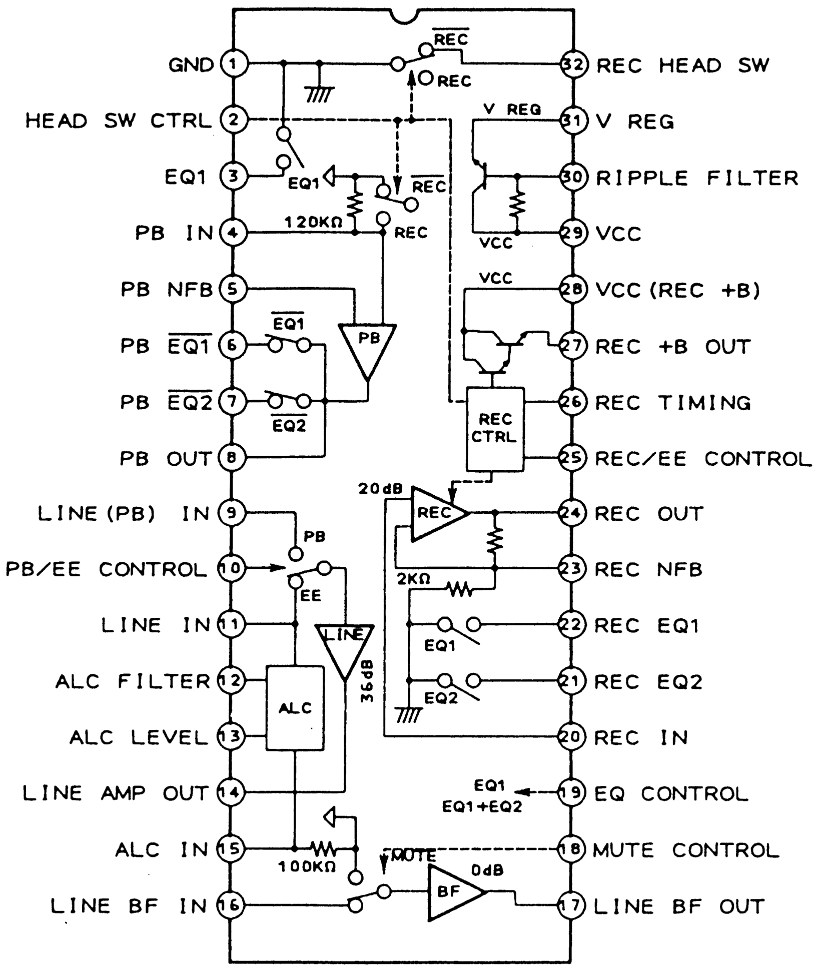
REMO-CON PCB B1043A5010

NOTE
UNLESS OTHERWISE SPECIFIED
ALL RESISTORS IN OHMS 1/8W(J)
ALL CAPACITORS IN μF 50WV(J)

RC-V1002E
REMOTE CONTROL UNIT
SCHEMATIC DIAGRAM

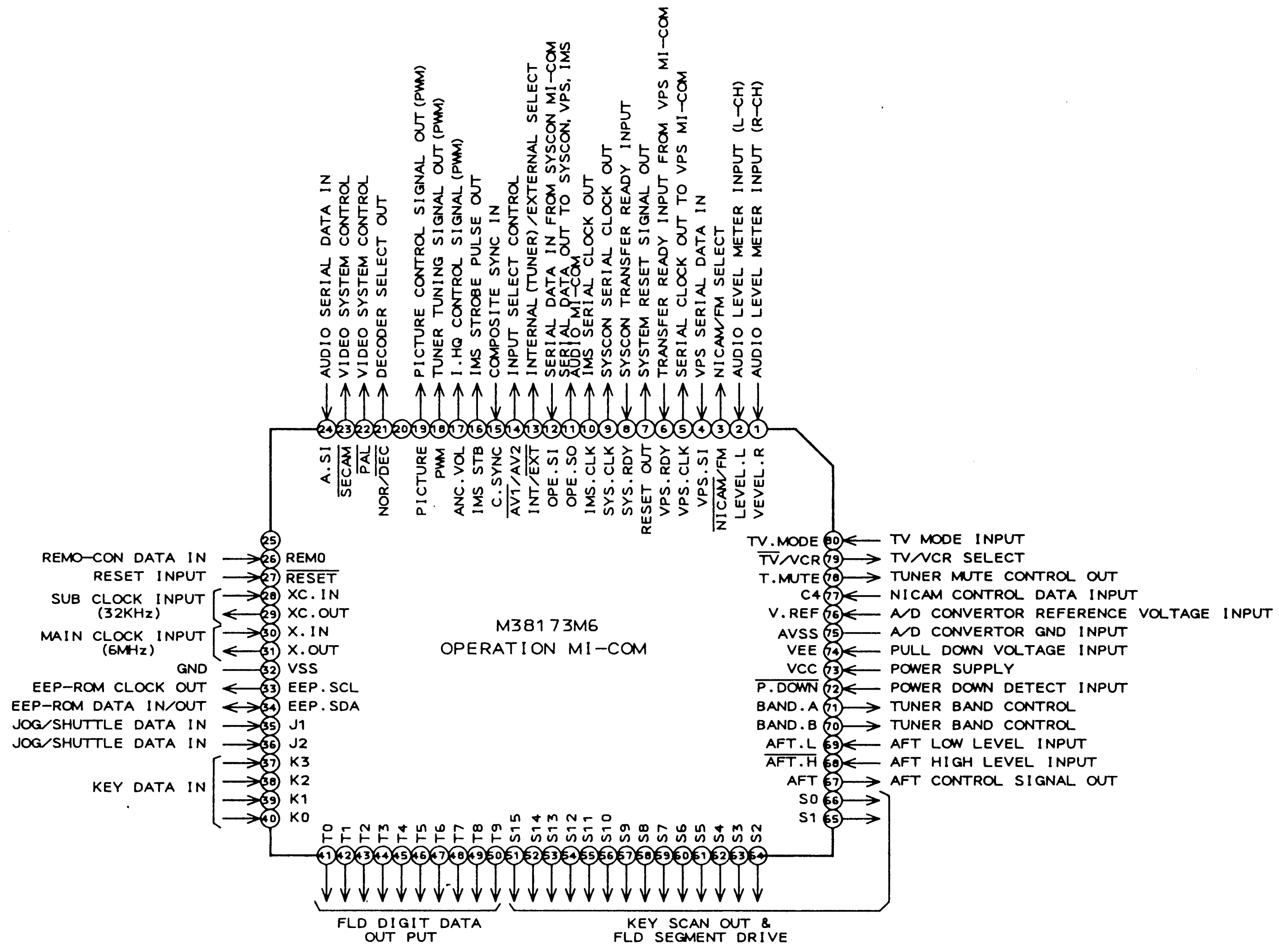
No.16-16 B104302M
A2

BA7765AS (AUDIO SIGNAL REC/PB AMPLIFIER)



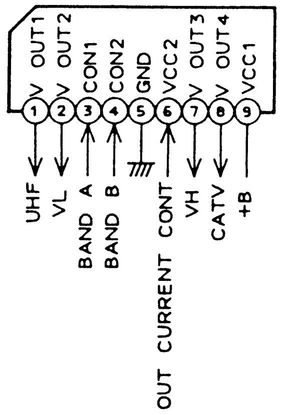
GND 1
HEAD SW CTRL 2
EQ1 3
PB IN 4
PB NFB 5
PB EQ1 6
PB EQ2 7
PB OUT 8
LINE (PB) IN 9
PB/EE CONTROL 10
LINE IN 11
ALC FILTER 12
ALC LEVEL 13
LINE AMP OUT 14
ALC IN 15
LINE BF IN 16
32 REC HEAD SW
31 V REG
30 RIPPLE FILTER
29 VCC
28 VCC (REC +B)
27 REC +B OUT
26 REC TIMING
25 REC/EE CONTROL
24 REC OUT
23 REC NFB
22 REC EQ1
21 REC EQ2
20 REC IN
19 EQ CONTROL
18 MUTE CONTROL
17 LINE BF OUT
REC
REC
V REG
VCC
VCC
EQ1
REC
120KΩ
REC
EQ1
EQ2
PB
REC CTRL
20dB
REC
PB
EE
2KΩ
EQ1
EQ2
LINE
36dB
ALC
EQ1
EQ1+EQ2
MUTE
100KΩ
0dB
BF

M38173M6 (OPERATION MI-COM)



AUDIO SERIAL DATA IN
VIDEO SYSTEM CONTROL
VIDEO SYSTEM CONTROL
DECODER SELECT OUT
PICTURE CONTROL SIGNAL OUT (PWM)
TUNER TUNING SIGNAL OUT (PWM)
I.HQ CONTROL SIGNAL (PWM)
IMS STROBE PULSE OUT
COMPOSITE SYNC IN
INPUT SELECT CONTROL
INTERNAL (TUNER)/EXTERNAL SELECT
SERIAL DATA IN FROM SYSCON MI-COM
SERIAL DATA OUT TO SYSCON, VPS, IMS AUDIO MI-COM
IMS SERIAL CLOCK OUT
SYSCON SERIAL CLOCK OUT
SYSCON TRANSFER READY INPUT
SYSTEM RESET SIGNAL OUT
TRANSFER READY INPUT FROM VPS MI-COM
SERIAL CLOCK OUT TO VPS MI-COM
VPS SERIAL DATA IN
NICAM/FM SELECT
AUDIO LEVEL METER INPUT (L-CH)
AUDIO LEVEL METER INPUT (R-CH)
24 A.SI
23 SECAM
22 PAL
21 NOR/DEC
20
19 PICTURE
18 PWM
17 ANC.VOL
16 IMS STB
15 C.SYNC
14 AV1/AV2
13 INT/EXT
12 OPE.SI
11 OPE.SO
10 IMS.CLK
9 SYS.CLK
8 SYS.RDY
7 RESET OUT
6 VPS.RDY
5 VPS.CLK
4 VPS.SI
3 NICAM/FM
2 LEVEL.L
1 VEVEL.R
REMO-CON DATA IN 25 REMO
RESET INPUT 27 RESET
SUB CLOCK INPUT (32KHz) 28 XC.IN
29 XC.OUT
MAIN CLOCK INPUT (6MHz) 30 X.IN
31 X.OUT
GND 32 VSS
EEP-ROM CLOCK OUT 33 EEP.SCL
EEP-ROM DATA IN/OUT 34 EEP.SDA
JOG/SHUTTLE DATA IN 35 J1
JOG/SHUTTLE DATA IN 36 J2
KEY DATA IN 37 K3
38 K2
39 K1
40 K0
M38173M6
OPERATION MI-COM
TV.MODE 80 TV MODE INPUT
TV/VCR 79 TV/VCR SELECT
T.MUTE 78 TUNER MUTE CONTROL OUT
C4 77 NICAM CONTROL DATA INPUT
V.REF 76 A/D CONVERTOR REFERENCE VOLTAGE INPUT
AVSS 75 A/D CONVERTOR GND INPUT
VEE 74 PULL DOWN VOLTAGE INPUT
VCC 73 POWER SUPPLY
P.DOWN 72 POWER DOWN DETECT INPUT
BAND.A 71 TUNER BAND CONTROL
BAND.B 70 TUNER BAND CONTROL
AFT.L 69 AFT LOW LEVEL INPUT
AFT.H 68 AFT HIGH LEVEL INPUT
AFT 67 AFT CONTROL SIGNAL OUT
S0 66
S1 65
T0 T1 T2 T3 T4 T5 T6 T7 T8 T9
41 42 43 44 45 46 47 48 49 50
S15 S14 S13 S12 S11 S10 S9 S8 S7 S6 S5 S4 S3 S2
51 52 53 54 55 56 57 58 59 60 61 62 63 64
FLD DIGIT DATA OUT PUT
KEY SCAN OUT & FLD SEGMENT DRIVE

LA7910 (TUNER BAND SELECTOR)

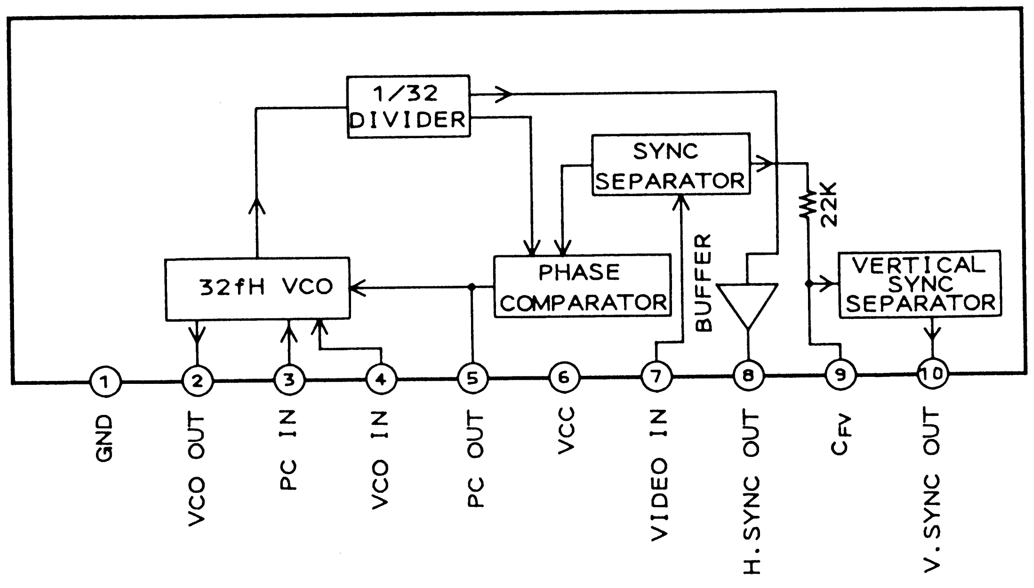


V OUT1 1
V OUT2 2
CON1 3
CON2 4
GND 5
VCC2 6
V OUT3 7
V OUT4 8
VCC1 9
UHF
VL
BAND A
BAND B
OUT CURRENT CONT
VH
CATV
+B

INPUT		OUTPUT			
CON1	CON2	V OUT1	V OUT2	V OUT3	V OUT4
L	L	H	Z	Z	Z
H	L	Z	H	Z	Z
L	H	Z	Z	H	Z
H	H	Z	Z	Z	H

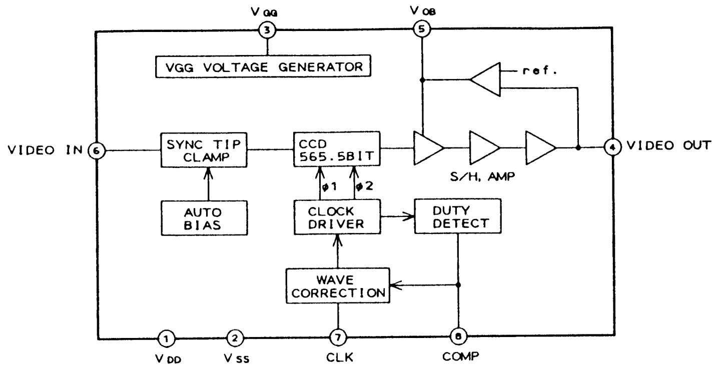
Z:HIGH IMPEDANCE

MM1068XS (SYNC SEPARATOR)



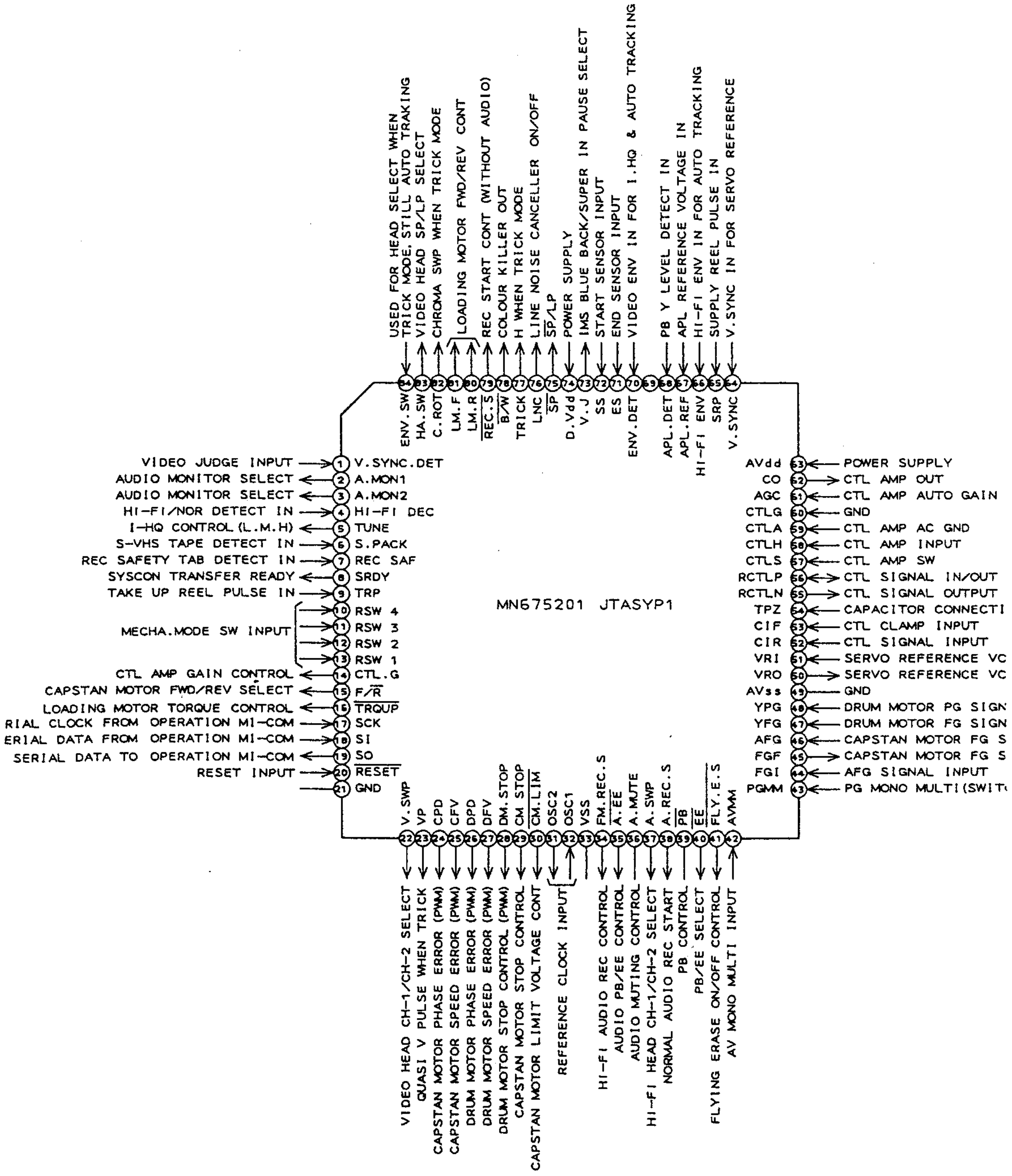
1/32 DIVIDER
SYNC SEPARATOR
22K
32fH VCO
PHASE COMPARATOR
BUFFER
VERTICAL SYNC SEPARATOR
1 GND
2 VCO OUT
3 PC IN
4 VCO IN
5 PC OUT
6 VCC
7 VIDEO IN
8 H.SYNC OUT
9 CFV
10 V.SYNC OUT

LC8992 (CCD 1H DELAY LINE)

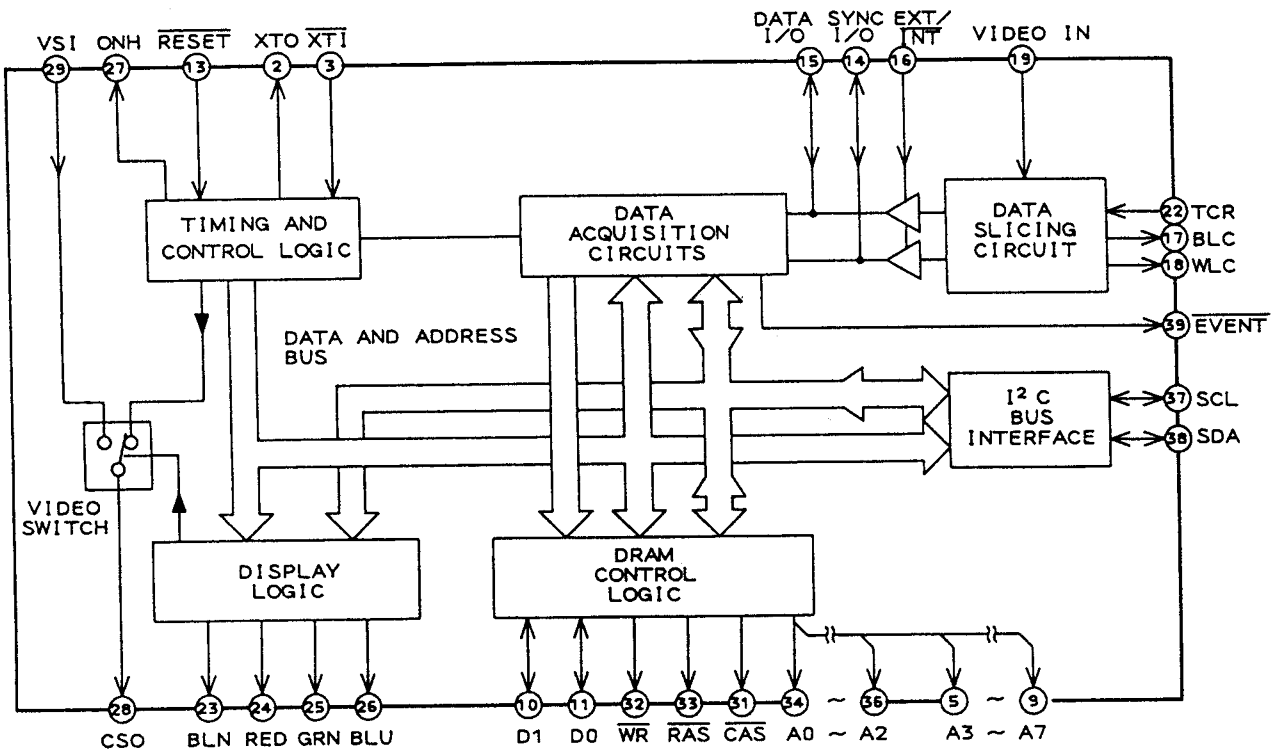


VGG 3
VDD 5
VGG VOLTAGE GENERATOR
ref.
VIDEO IN 6
SYNC TIP CLAMP
CCD 565.5BIT
φ1 φ2
S/H, AMP
4 VIDEO OUT
AUTO BIAS
CLOCK DRIVER
DUTY DETECT
WAVE CORRECTION
1 VDD
2 VSS
7 CLK
8 COMP

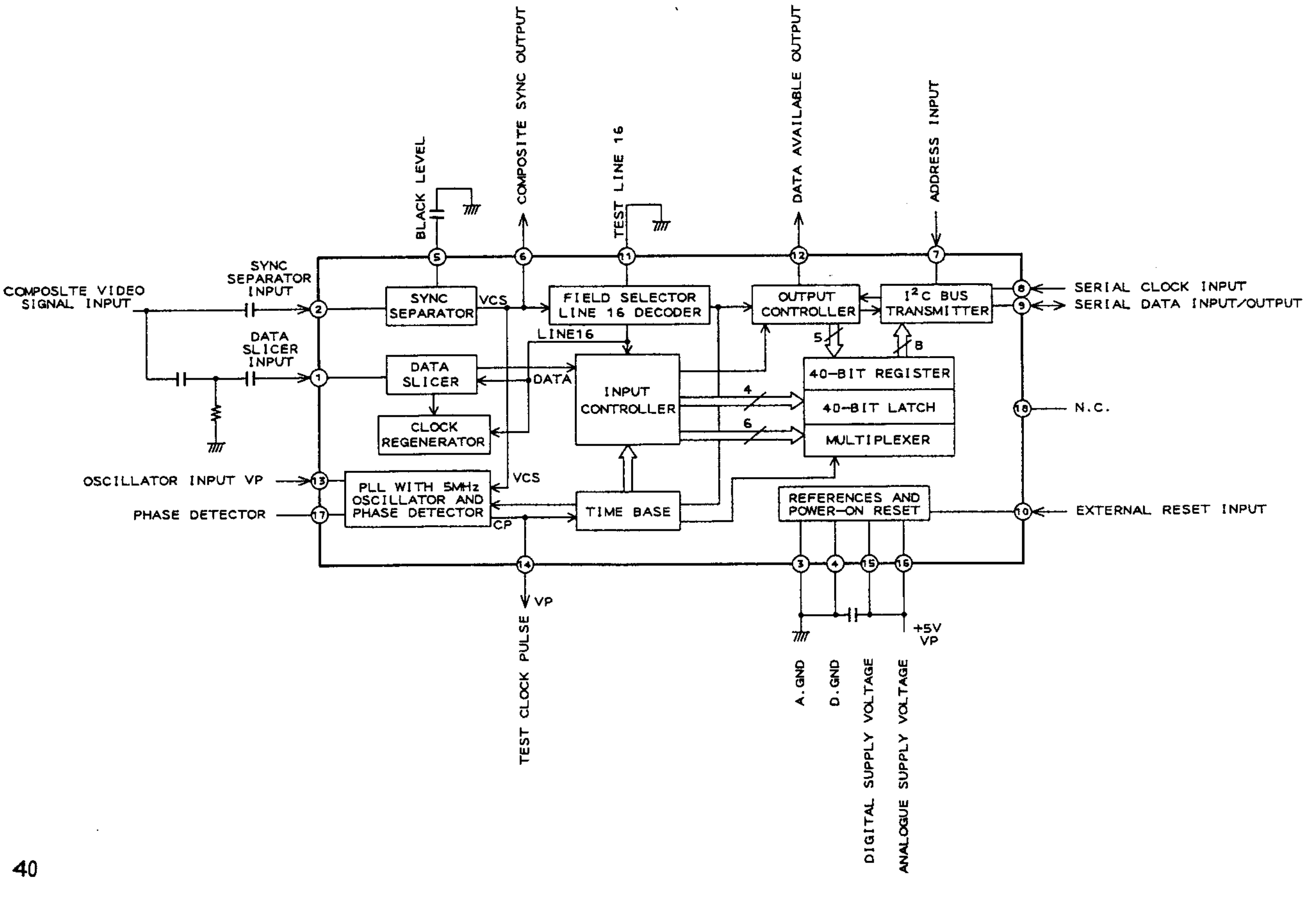
MN675201 (JTASYP1)


MN675201 JTASYP1
VIDEO JUDGE INPUT ① V.SYNC.DET
AUDIO MONITOR SELECT ② A.MON1
AUDIO MONITOR SELECT ③ A.MON2
HI-FI/NOR DETECT IN ④ HI-FI DEC
I-HQ CONTROL (L.M.H) ⑤ TUNE
S-VHS TAPE DETECT IN ⑥ S.PACK
REC SAFETY TAB DETECT IN ⑦ REC SAF
SYSCON TRANSFER READY ⑧ SRDY
TAKE UP REEL PULSE IN ⑨ TRP
MECHA.MODE SW INPUT ⑩ RSW 4 ⑪ RSW 3 ⑫ RSW 2 ⑬ RSW 1
CTL AMP GAIN CONTROL ⑭ CTL.G
CAPSTAN MOTOR FWD/REV SELECT ⑮ F/R
LOADING MOTOR TORQUE CONTROL ⑯ TRQUP
RIAL CLOCK FROM OPERATION MI-COM ⑰ SCK
ERIAL DATA FROM OPERATION MI-COM ⑱ SI
SERIAL DATA TO OPERATION MI-COM ⑲ SO
RESET INPUT ⑳ RESET
㉑ GND
㉒ V.SWP VIDEO HEAD CH-1/CH-2 SELECT
㉓ VP QUASI V PULSE WHEN TRICK
㉔ CPD CAPSTAN MOTOR PHASE ERROR (PWM)
㉕ CFV CAPSTAN MOTOR SPEED ERROR (PWM)
㉖ DPD DRUM MOTOR PHASE ERROR (PWM)
㉗ DFV DRUM MOTOR SPEED ERROR (PWM)
㉘ DM.STOP DRUM MOTOR STOP CONTROL (PWM)
㉙ CM STOP CAPSTAN MOTOR STOP CONTROL
㉚ CM.LIM CAPSTAN MOTOR LIMIT VOLTAGE CONT
㉛ OSC2 ㉜ OSC1 REFERENCE CLOCK INPUT
㉝ VSS
㉞ FM.REC.S HI-FI AUDIO REC CONTROL
㉟ A.EE AUDIO PB/EE CONTROL
(36) A.MUTE AUDIO MUTING CONTROL
(37) A.SWP HI-FI HEAD CH-1/CH-2 SELECT
(38) A.REC.S NORMAL AUDIO REC START
(39) PB PB CONTROL
(40) EE PB/EE SELECT
(41) FLY.E.S FLYING ERASE ON/OFF CONTROL
(42) AVMM AV MONO MULTI INPUT
(43) PGMM PG MONO MULTI (SWIT
(44) FGI AFG SIGNAL INPUT
(45) FGF CAPSTAN MOTOR FG S
(46) AFG CAPSTAN MOTOR FG S
(47) YFG DRUM MOTOR FG SIGN
(48) YPG DRUM MOTOR PG SIGN
(49) AVss GND
(50) VRO SERVO REFERENCE VC
(51) VRI SERVO REFERENCE VC
(52) CIR CTL SIGNAL INPUT
(53) CIF CTL CLAMP INPUT
(54) TPZ CAPACITOR CONNECTI
(55) RCTLN CTL SIGNAL OUTPUT
(56) RCTLP CTL SIGNAL IN/OUT
(57) CTLS CTL AMP SW
(58) CTLH CTL AMP INPUT
(59) CTLA CTL AMP AC GND
(60) CTLG GND
(61) AGC CTL AMP AUTO GAIN
(62) CO CTL AMP OUT
(63) AVdd POWER SUPPLY
(64) V.SYNC V.SYNC IN FOR SERVO REFERENCE
(65) SRP SUPPLY REEL PULSE IN
(66) HI-FI ENV HI-FI ENV IN FOR AUTO TRACKING
(67) APL.REF APL REFERENCE VOLTAGE IN
(68) APL.DET PB Y LEVEL DETECT IN
(69)
(70) ENV.DET VIDEO ENV IN FOR I.HQ & AUTO TRACKING
(71) ES END SENSOR INPUT
(72) SS START SENSOR INPUT
(73) V.J IMS BLUE BACK/SUPER IN PAUSE SELECT
(74) D.Vdd POWER SUPPLY
(75) SP SP/LP
(76) LNC LINE NOISE CANCELLER ON/OFF
(77) TRICK H WHEN TRICK MODE
(78) B/W COLOUR KILLER OUT
(79) REC.S REC START CONT (WITHOUT AUDIO)
(80) LM.R LOADING MOTOR FWD/REV CONT
(81) LM.F
(82) C.ROT CHROMA SWP WHEN TRICK MODE
(83) HA.SW VIDEO HEAD SP/LP SELECT
(84) ENV.SW USED FOR HEAD SELECT WHEN TRICK MODE, STILL AUTO TRAKING

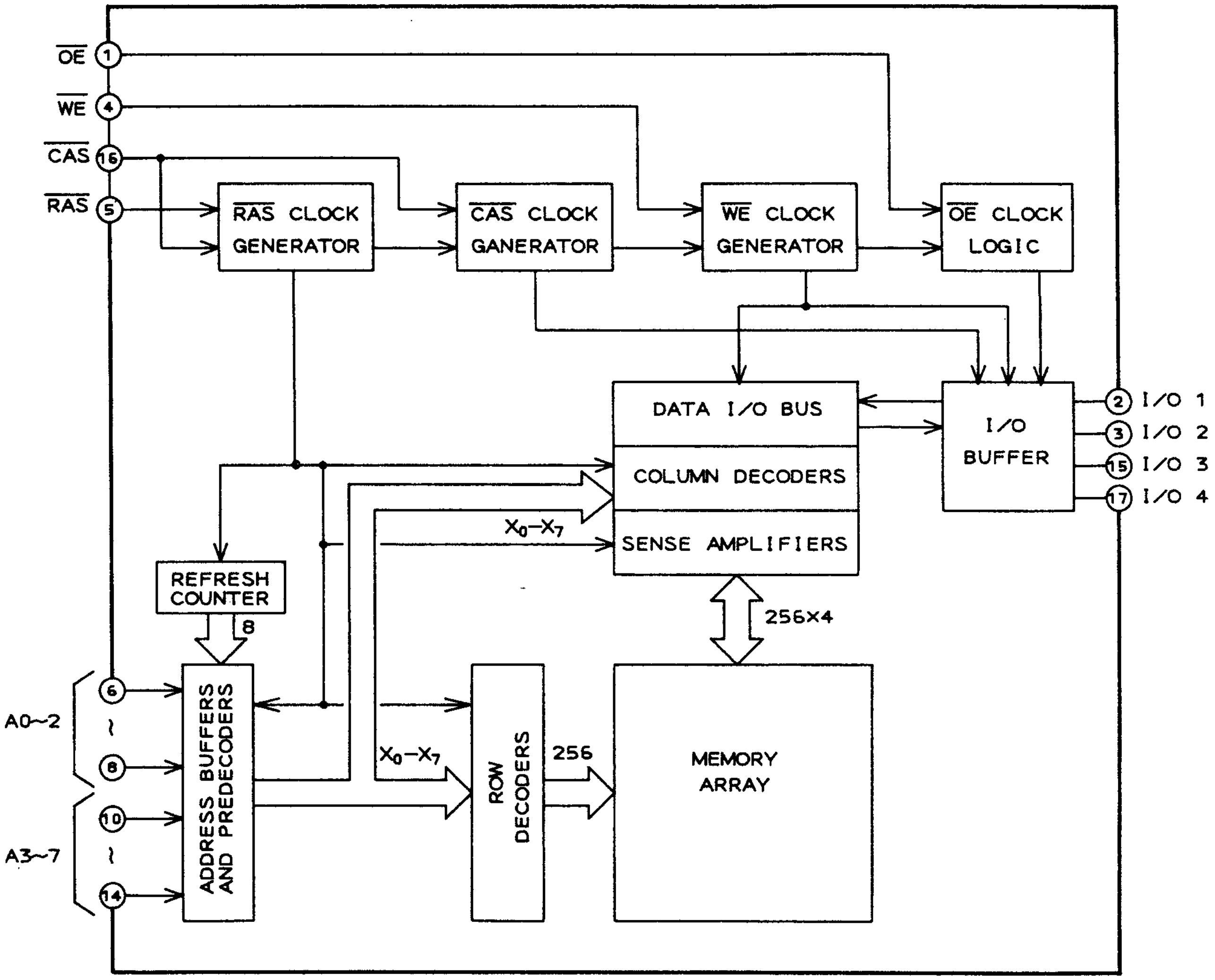
MV1815 (TELETEXT DECODER FOR 625 LINE OPERATION)


VSI
ONH
RESET
XTO
XTI
DATA I/O
SYNC I/O
EXT/INT
VIDEO IN
29
27
13
2
3
15
14
16
19
TIMING AND CONTROL LOGIC
DATA ACQUISITION CIRCUITS
DATA SLICING CIRCUIT
22 TCR
17 BLC
18 WLC
39 EVENT
DATA AND ADDRESS BUS
I² C BUS INTERFACE
37 SCL
38 SDA
VIDEO SWITCH
DISPLAY LOGIC
DRAM CONTROL LOGIC
28
23
24
25
26
10
11
32
33
31
34
36
5
9
CSO
BLN
RED
GRN
BLU
D1
D0
WR
RAS
CAS
A0 ~ A2
A3 ~ A7

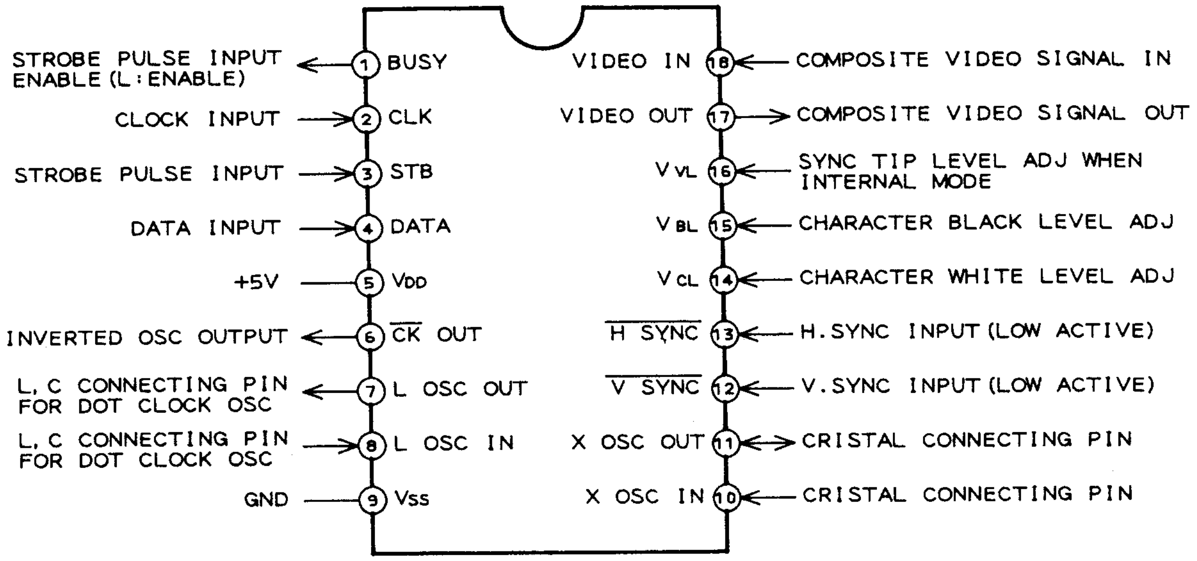
SAA4700 (VPS DATALINE PROCESSOR)


BLACK LEVEL
COMPOSITE SYNC OUTPUT
TEST LINE 16
DATA AVAILABLE OUTPUT
ADDRESS INPUT
5
6
11
12
7
COMPOSLTE VIDEO SIGNAL INPUT
SYNC SEPARATOR INPUT
2
DATA SLICER INPUT
1
SYNC SEPARATOR
VCS
FIELD SELECTOR LINE 16 DECODER
OUTPUT CONTROLLER
I²C BUS TRANSMITTER
8
9
SERIAL CLOCK INPUT
SERIAL DATA INPUT/OUTPUT
LINE16
5
8
DATA SLICER
DATA
INPUT CONTROLLER
4
6
40-BIT REGISTER
40-BIT LATCH
MULTIPLEXER
CLOCK REGENERATOR
18
N.C.
OSCILLATOR INPUT VP
13
PHASE DETECTOR
17
PLL WITH 5MHz OSCILLATOR AND PHASE DETECTOR
VCS
CP
TIME BASE
REFERENCES AND POWER-ON RESET
10
EXTERNAL RESET INPUT
14
VP
TEST CLOCK PULSE
3
4
15
16
+5V VP
A.GND
D.GND
DIGITAL SUPPLY VOLTAGE
ANALOGUE SUPPLY VOLTAGE

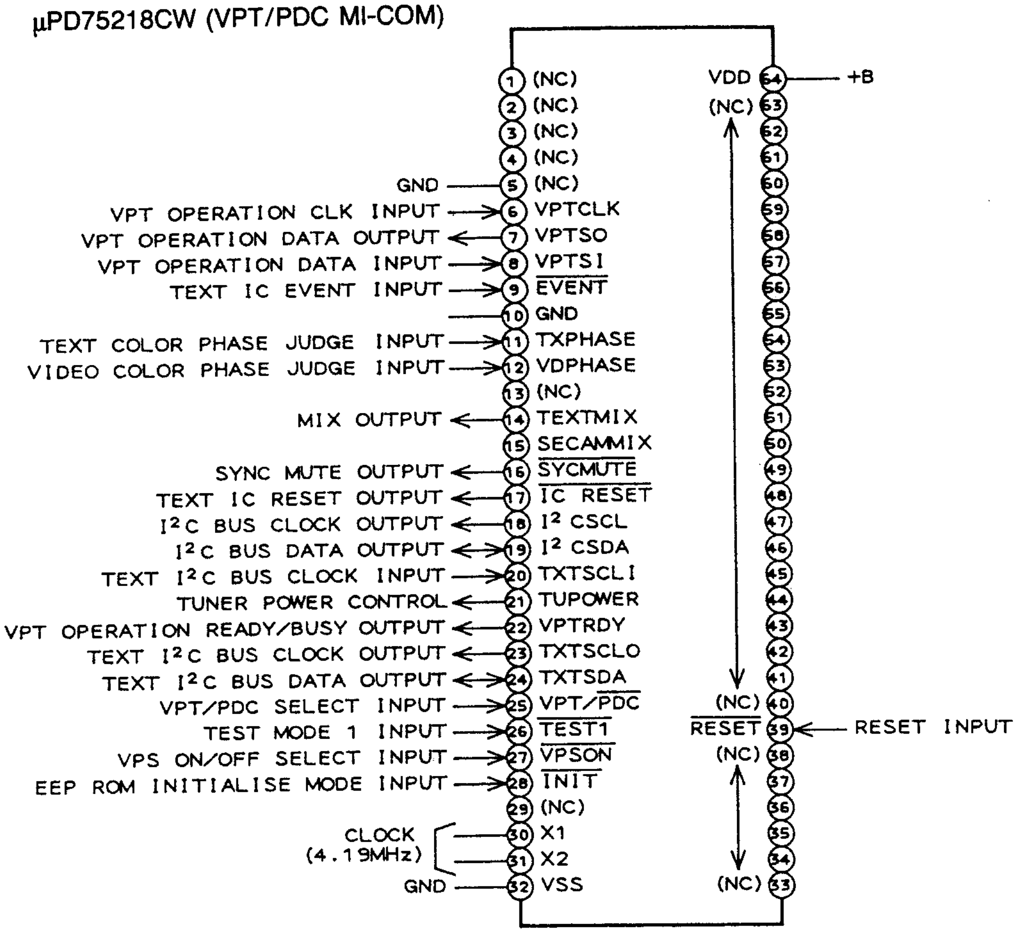
V53C464A (64K ×4 BIT D-RAM)


$\overline{OE}$ 1
$\overline{WE}$ 4
$\overline{CAS}$ 16
$\overline{RAS}$ 5
$\overline{RAS}$ CLOCK GENERATOR
$\overline{CAS}$ CLOCK GANERATOR
$\overline{WE}$ CLOCK GENERATOR
$\overline{OE}$ CLOCK LOGIC
DATA I/O BUS
COLUMN DECODERS
SENSE AMPLIFIERS
I/O BUFFER
2 I/O 1
3 I/O 2
15 I/O 3
17 I/O 4
X_0–X_7
REFRESH COUNTER
8
256×4
A0~2
6
~
8
A3~7
10
~
14
ADDRESS BUFFERS AND PREDECODERS
X_0–X_7
ROW DECODERS
256
MEMORY ARRAY

µPD6450 (CHARACTER GENERATOR)


STROBE PULSE INPUT ENABLE (L : ENABLE)
1 BUSY
CLOCK INPUT
2 CLK
STROBE PULSE INPUT
3 STB
DATA INPUT
4 DATA
+5V
5 VDD
INVERTED OSC OUTPUT
6 CK OUT
L, C CONNECTING PIN FOR DOT CLOCK OSC
7 L OSC OUT
L, C CONNECTING PIN FOR DOT CLOCK OSC
8 L OSC IN
GND
9 Vss
VIDEO IN 18
COMPOSITE VIDEO SIGNAL IN
VIDEO OUT 17
COMPOSITE VIDEO SIGNAL OUT
VVL 16
SYNC TIP LEVEL ADJ WHEN INTERNAL MODE
VBL 15
CHARACTER BLACK LEVEL ADJ
VCL 14
CHARACTER WHITE LEVEL ADJ
H SYNC 13
H.SYNC INPUT (LOW ACTIVE)
V SYNC 12
V.SYNC INPUT (LOW ACTIVE)
X OSC OUT 11
CRISTAL CONNECTING PIN
X OSC IN 10
CRISTAL CONNECTING PIN

µPD75218CW (VPT/PDC MI-COM)


1 (NC)
2 (NC)
3 (NC)
4 (NC)
GND
5 (NC)
VPT OPERATION CLK INPUT
6 VPTCLK
VPT OPERATION DATA OUTPUT
7 VPTSO
VPT OPERATION DATA INPUT
8 VPTSI
TEXT IC EVENT INPUT
9 EVENT
10 GND
TEXT COLOR PHASE JUDGE INPUT
11 TXPHASE
VIDEO COLOR PHASE JUDGE INPUT
12 VDPHASE
13 (NC)
MIX OUTPUT
14 TEXTMIX
15 SECAMMIX
SYNC MUTE OUTPUT
16 SYCMUTE
TEXT IC RESET OUTPUT
17 IC RESET
I²C BUS CLOCK OUTPUT
18 I² CSCL
I²C BUS DATA OUTPUT
19 I² CSDA
TEXT I²C BUS CLOCK INPUT
20 TXTSCLI
TUNER POWER CONTROL
21 TUPOWER
VPT OPERATION READY/BUSY OUTPUT
22 VPTRDY
TEXT I²C BUS CLOCK OUTPUT
23 TXTSCLO
TEXT I²C BUS DATA OUTPUT
24 TXTSDA
VPT/PDC SELECT INPUT
25 VPT/PDC
TEST MODE 1 INPUT
26 TEST1
VPS ON/OFF SELECT INPUT
27 VPSON
EEP ROM INITIALISE MODE INPUT
28 INIT
29 (NC)
CLOCK (4.19MHz)
30 X1
31 X2
GND
32 VSS
VDD 64
+B
(NC) 63
62
61
60
59
58
57
56
55
54
53
52
51
50
49
48
47
46
45
44
43
42
41
(NC) 40
RESET 39
RESET INPUT
(NC) 38
37
36
35
34
(NC) 33

Vorh.

di SH

VS-F1000EK-2VN
VS-F1000EOG-2VD

AKAI SERVICE MANUAL
(ADDITIONAL)

Use this additional service manual together with the previously published service manual for the AKAI VS-F1000EK-VN/EOG-VD, VS-F1010EOH-D/EOH-N and VS-F1030EOH-DN models.
For schematic diagrams and PC Boards, please refer to those provided for the VS-F1000EK-VN (for VS-F1000EK-2VN) and VS-F1000EOG-VD (for VS-F1000EOG-2VD) models.

VIDEO CASSETTE RECORDER

MODEL **VS-F1000EK-2VN**
MODEL **VS-F1000EOG-2VD**

SPECIFICATIONS

Format	
F1000EK-2VN	VHS standard
F1000EOG-2VD	VHS standard (PAL, MESECAM)
Video recording system	Rotary, slant azimuth two-head helical scan system
Rotary heads	4 video heads, 2 audio heads and 1 flying erase head
RF input	
F1000EK-2VN	System I with monaural or multiplexed 2 channel audio (NICAM) UHF ch 21 - 69
F1000EOG-2VD	System B, G with monaural or multiplexed 2 channel audio VHF ch 2 - 4, 5 - 12 UHF ch 21 - 69 Cable ch S1' - S3', S1 - S41
RF output	
F1000EK-2VN	System I type modulation UHF ch 30 - 39 adjustable (preset ch 36)
F1000EOG-2VD	System G type modulation UHF ch 30 - 39 adjustable (preset ch 36)
Recording (line input)	
F1000EK-2VN	PAL
F1000EOG-2VD	PAL, SECAM (recorded as MESECAM)
Playback (line output)	
F1000EK-2VN	PAL
F1000EOG-2VD	PAL, SECAM (MESECAM tape)
Video	
Line input level	0.5 - 2.0 Vp-p / 75 ohms unbalanced
Line output level	1.0 Vp-p / 75 ohms, unbalanced
S/N ratio	More than 45 dB
Horizontal resolution	More than 250 lines
Audio (VHS Hi-Fi : 2 ch, Linear : 1 ch)	
Line input level	−6 dBs / 50 k ohms, unbalanced
Line output level	−6 dBs / 1 k ohms, unbalanced
Dynamic range	More than 90 dB (VHS Hi-Fi)
Frequency response	20 - 20,000 Hz (VHS Hi-Fi)
Wow & Flutter	Less than 0.005% WRMS (VHS Hi-Fi)
Recording/playback time	
SP mode	240 min. with E-240 cassette
LP mode	480 min. with E-240 cassette
Tape speed	
SP mode	23.39 mm / sec.
LP mode	11.695 mm / sec.
Quick finder	
SP mode	approx. 5 or 15 times normal speed
LP mode	approx. 3 or 7 times normal speed
FF, REW time	approx. 4.5 min. with E-180 cassette
Timer	
Program	8 programs / 1 year and QUICK TIMER
Clock reference	Quartz crystal
Display	TV screen & FL (Tape counter Timer, etc.)
Power requirement	
F1000EK-2VN	240 V AC, 50 Hz
F1000EOG-2VD	230 V AC, 50 Hz
Power consumption	
F1000EK-2VN	44 W
F1000EOG-2VD	41 W
Operating temperture	5°C - 40°C
Dimensions	425 (W) x 99 (H) x 365 (D) mm
Weight	7.2 kg

Standard accessories

Antenna cable	1
Remote control unit	1
Batteries for remote control	3
Operator's manual	1

0 dBs = 0.775 V

∗ For improvement purposes, specifications and design are subject to change without notice.

I. PARTS LIST

ATTENTION

1. **When placing an order for parts, be sure to list the Part No., Model No. and the description of each part. Otherwise, the non-delivery of the part or the delivery of a wrong part may result.**
2. **Please make sure that Part No. is correct when ordering. If not, a part different from the one you ordered may be delivered.**
3. **Since the parts shown in Parts List of Preliminary Service Manual may have been the subject of changes, please use this Parts List for all future reference.**

HOW TO USE THIS PARTS LIST

1. This Parts List lists those parts which are considered necessary for repairs. Other common parts, such as resistors and capacitors, are listed in the "Common List for Service Parts" from which these parts should be selected and stocked.
2. The Recommended Spare Parts List shows those parts in the Parts List which are considered particularly important for service.
3. Parts not shown in the Parts List and "Common List for Service Parts" will not in principle be supplied.
4. How to read the Parts List.

a) Mechanism Block

2. HEAD BASE BLOCK

Ref. No.	Part No.	Description
1	BH-T2023A320A	HEAD BASE BLOCK
2	HP-H2206A010A	HEAD R/P PR4-8FU C
3	ZS-477876	PAN20×03STL CMT
4	ZS-536488	BID20×08STL CMT
5	ZG-402895	SP CS ANGLE ADJUST

SP (Service Parts) Classification

This number corresponds with the individual parts index number in that figure.

b) PC Board

6. MAIN PC BOARD

Ref. No.	Part No.	Description
IC1	EI-324536	IC HD14049BP
IC2	EI-336801	IC MB8841-564M
C1A	EC-338399	C MMY V 223M 250AC [U,E,B,S]
C1B	EC-350949	C MMY V 223M 250DC [J]
C1C	EC-338397	C MMY V 223M 125AC [C,A]
X1	EI-318384	OSC X'TAL NC-18C

Symbols for primary destination

[A] : AAL (U.S.A)
[S] : SAA (Australia)
[B] : BEAB (England)
[U] : U/T (Universal Area)
[C] : CSA (Canada)
[E] : CEE (Europe)
[V] : VDE (Germany)
[J] : JPN (Japan)
[Y] : Custom Version

SP (Service Parts) Classification

These reference symbols correspond with component symbols in the Schematic Diagrams.

The available PC Board Blocks are listed separately.

5. When Part No. is known, Parts Index at end of Parts List can be used to locate where that part is shown in Parts List by its Reference No.listed at right of Part No.

WARNING

⚠ (*) INDICATES SAFETY CRITICAL COMPONENTS. FOR CONTINUED SAFETY, REPLACE SAFETY CRITICAL COMPONENTS ONLY WITH MANUFACTURE'S RECOMMENDED PARTS.

AVERTISSEMENT

⚠ (*) IL INDIQUE LES COMPOSANTS CRITIQUES DE SÉCURITÉ. POUR MAINTENIR LE DEGRÉ DE SÉCURITÉDE L'APPAREIL, NE REMPLACER QUE DES PIÉCES RECOMMANDEES PAR LÉ FABRICANT.

1. RECOMMENDED SPARE PARTS

We suggest you to stock the following Recommended Spare Part items listed below since they can cover most of the routine service.

Ref. No.	Part No.	Description
1	AV-B1040A010G	REMOCON BLK RC-V1001E [EK]
2	AV-B1040A010H	REMOCON BLK RC-V1001G [EOG]
3	BB-V1130A020F	MECHA DECK BLK F1010EOH-D
4	BL-V1102A140A	ARM LOADING BLK 425EA
5	BL-387458J2	CAPSTAN BRAKE PART
6	BL-V1123A050B	TENSION ARM BLK F10101EOH-D
7	BM-400682J3	MOTOR DFX-67B3VWB2 [CAPSTAN MOTOR]
8	BM-401296J1	MOTOR E20EL89 [DRUM MOTOR]
9	BM-387503J	MOTOR PART [LOADING MOTOR]
10	*BT-408920J	TRANS POW V1154 EA [EK]
11	*BT-408921J	TRANS POW V1154 EOG [EOG]
12	BV-V1102A150A	CASSETTE LOAD BLK 425EA
13	BV-V1102A070A	LEADER S BLK 425EA
14	BV-V1102A080A	LEADER T BLK 425EA
15	BV-V1123A410E	LOWER DRUM BLK F1010EA-D
16	BV-403410J	RF CONVERTER MDLK6B733A EK [EK]
17	BV-403409J	RF CONVERTER MDLK6D755A EO [EOG]
18	BV-V1123A420F	UPPER DRUM BLK F1010EA-D
19	*EC-391843J	C DOUBLE FYD0H223Z 5.5DC
20	ED-397391J	D LED BR3668S RED
21	ED-390011J	D LED GL451 INFRARED [D1]
22	ED-403450J	D LED SE303ARF-C INFRARED
23	ED-401099J	D SCHOTTKY MA719 T26 40/0.5A
24	ED-360318	D SILICON H MA700
25	ED-307572	D SILICON H 1SS131 [EOG]
26	*ED-394708J	D SILICON RBA402 200/4.0A
27	ED-511907	D SILICON 1N4002 100/1.0A
28	ED-394936J	D VARACTOR 1SV111
29	ED-364032	D ZENER H HZS10B2J
30	ED-404468J	D ZENER H HZS11C3 T26
31	ED-391005J	D ZENER H HZS12B1
32	ED-410368J	D ZENER H HZS15-3 T26
33	ED-408721J	D ZENER H HZS2B3
34	ED-389686J	D ZENER H HZS2C2
35	ED-400166J	D ZENER H HZS3B2
36	ED-397399J	D ZENER H HZS3C3
37	ED-412008J	D ZENER H HZS33-1L T26
38	ED-387762J	D ZENER H HZS36-3L
39	ED-408719J	D ZENER H HZS4C2
40	ED-408915J	D ZENER H HZS5A2
41	ED-388358J	D ZENER H HZS5C2
42	ED-397233J	D ZENER H HZS5C3
43	ED-387919J	D ZENER H HZS6A1L
44	ED-378530J	D ZENER H HZS6B2L
45	ED-403743J	D ZENER H HZS6B3
46	ED-387783J	D ZENER H HZS6C3L
47	ED-387763J	D ZENER H HZS7B3L
48	ED-388368J	D ZENER H HZS9B3L
49	ED-387765J	D ZENER H HZS9C1L
50	*EF-601964	FUSE SEMKO T 250V 1.60A
51	*EF-601301	FUSE SEMKO T 250V 2.00A
52	EH-416491J	DL EFDJLA13A
53	EH-725827J	FILTER CE SAF32.9MDE70Z
54	EH-730625J	FILTER CE SAF38.9MZW70Z
55	EH-732528J	FILTER CE SAW SAF33.4MC70Z
56	EH-714628	FILTER CE SAW SAF39.5MZ70Z
57	EH-366894	FILTER CE SFE-4.16MB 4.16MHZ [EOG]
58	EH-394948J	FILTER CE SFT5.5MA
59	EH-394947J	FILTER CE SFT5.74MA
60	EH-416920J	FILTER CE SFT6.0MA
61	EH-368948	FILTER CE TPS5.5MW 5.5000MHZ
62	EH-373919	FILTER CE TPS6.0MB
63	EH-394684J	FILTER EMI ZBF503D-00TA T05
64	EH-394984J	FILTER LC BP SFB41743
65	EH-382829J	FILTER LC BP TH316BQM-2110QDAF
66	EH-364045	FILTER LC FF-78P
67	EH-394858J	FILTER LC LP MYV-2V2
68	EH-402170J	FILTER LC LP SEL-5065
69	EI-394680J	IC AN3171K
70	EI-396454J	IC AN3267K
71	EI-373981J1	IC BA10393N
72	EI-386468J	IC BA3308
73	EI-364896	IC BA6138
74	EI-366892	IC BA7025L [EOG]
75	EI-387586J	IC BA7244BS
76	EI-394983J	IC BA7703K1
77	EI-397285J	IC BA7740S
78	EI-388360J	IC BA7765AS
79	EI-356457	IC BU4013B
80	EI-394937J	IC CF70124
81	EI-394949J	IC IR3P72
82	EI-408959J	IC LA7220
83	EI-394839J	IC LA7332
84	EI-729997J	IC LA7575
85	EI-390053J	IC LA7910 [EOG]
86	EI-408964J	IC LA7954
87	EI-394951J	IC LB1215
88	EI-403233J	IC LB1641
89	EI-394856J	IC LC8992
90	EI-394861J	IC LVA521S-2
91	EI-401050J	IC LVA523SA2
92	EI-389622J	IC L5631
93	EI-387019J	IC MC1377P
94	EI-408961J	IC MM1031XS
95	EI-403469J	IC MM1068XS
96	EI-404505J1	IC MN675201A-XDZ JTASYP2
97	EI-419092J	IC MV1815-2ABA
98	EI-416978J	IC M38173M6-246FP JT2OPP1 [EOG]
99	EI-416979J	IC M38173M6-247FP JT2OPD1 [EK]
100	EI-393323J	IC M5218AL-771
101	EI-400756J	IC NJM4558L-B
102	EI-201940	IC NJM4558S
103	EI-400672J	IC S-8052ALB-LE
104	EI-373955	IC S-8053ALR
105	EI-385958J	IC SAA4700 [EOG]
106	EI-397560J	IC SAA7322GP
107	EI-405224J	IC ST24C02AB1/AAB
108	EI-410265J	IC ST24C04B1
109	EI-397123J	IC TA8703S
110	EI-332259	IC TC4052BP
111	EI-408930J	IC TDA8732
112	EI-405722J	IC UPD6450CX-515
113	EI-408449J	IC UPD75004GB-771 JXVPTR1 QF
114	EI-408432J3	IC UPD75218CW-025 JXVPT4 [EOG]
115	EI-410521J3	IC UPD75218CW-029 JXPDC4 [EK]
116	EI-410125J	IC V53C464AP-80
117	EI-403467J	OSC CE CSB500F40 15.680KHZ
118	EI-408450J	OSC CE CST2.45MGW 2.450MHZ
119	EI-405327J	OSC CE CST6.00MGW 6.000MHZ
120	EI-367882J1	OSC CE FCR4.19MC3 4.190MHZ
121	EI-414624J	OSC X'TAL APS-1002 8.000MHZ
122	EI-416872J	OSC X'TAL APS1004A 17.734475MH
123	EI-368825M	OSC X'TAL C-002RX 32.768KHZ
124	EI-408433J	OSC X'TAL HC-43/U 27750KHZ
125	EI-408933J	OSC X'TAL HC-49/U 11648KHZ
126	EI-408931J	OSC X'TAL HC-49/U 13104KHZ
127	EI-394673J	OSC X'TAL HC-49/U 8867.238KHZ
128	EI-403347J	OSC X'TAL NR-18-S 16.384MHZ
129	EI-381632J	OSC X'TAL 86686 4.433619MHZ
130	EM-408445J	IND FL FV548G CHARACTER
131	EO-394950J	COIL DET 1 134-5176
132	EO-396464J	COIL DET 1 134-5177
133	EO-408439J	COIL OSC 1 125-8019-31 70.0KHZ
134	EO-408440J	COIL OSC 1 125-8020-41 70.0KHZ
135	*ER-331619	R FUSE H S10 ERD2FC 1/4W 39R0G
136	*ER-401039J	R FUSE V T05 ERD2FCV 1/4W 4R7J
137	*ER-400605J	R FUSE V T05 ERD2FCV 1/4W15R0G

Ref. No.	Part No.	Description
138	*ER-408963J	R FUSE V T05 RF25SCVTP1/4WR33K
139	*ER-400729J	R FUSE V T05 RF25SCVTP1/4WR47K
140	*ER-403405J	R OMF H S12 FS 1W R75J
141	ES-373099	SW LEAF MTS10110MPC1
142	ES-391710J	SW LEAF SPPB51 01-1 NO
143	ES-416839J	SW MICRO MPU10240MMB0
144	ES-387465J	SW MODE SELECT MMS00070ZLBO [SW1]
145	ES-408428J	SW ROTARY ENCODER SRGPPJ
146	ES-409005J	SW ROTARY ENCODER SRGPPJ-1
147	ES-397339J	SW SLIDE ESD-170252
148	ES-409007J1	SW TACT HKW0606-01-500
149	ET-408988J	DETECTOR SBX1619-52
150	ET-403420J	DETECTOR SG-105LF [PH1][PH2]
151	ET-731437J	TR CHIP DTC114EK
152	ET-713614	TR CHIP 2SA1235 E,F
153	ET-725820J	TR CHIP 2SC2735J
154	ET-413009J	TR CHIP 2SC2884-Y TE12R T12E
155	ET-356336	TR DTA114ES
156	ET-408827J	TR DTA114TL T05
157	ET-363953	TR DTA114TS
158	ET-354415	TR DTA144ES
159	ET-373985	TR DTA144TS
160	ET-364065	TR DTA144WS
161	ET-353897	TR DTC114ES
162	ET-360399	TR DTC114TS [EK]
163	ET-394881J	TR DTC114WS
164	ET-382952J	TR DTC123ES
165	ET-354371	TR DTC124ES
166	ET-408826J	TR DTC143EL T05
167	ET-364060	TR DTC143ES
168	ET-354364	TR DTC143TS [EOG]
169	*ET-373391	TR DTC143ZS
170	ET-396488J	TR DTC144EL T05
171	ET-354414	TR DTC144ES
172	ET-370310	TR DTC144TS [EOG]
173	ET-356236	TR FET 2SK363 GR,BL [EOG]
174	ET-361490	TR PHOTO PN268 [TR1]
175	ET-390009J	TR PHOTO PT493F [TR4]
176	ET-364040	TR UN421D
177	ET-356224	TR 2SA1286 G,H,J F05
178	ET-353899	TR 2SA1317 S,T,U
179	*ET-404498J	TR 2SB1306 Q,R T05
180	ET-388338J	TR 2SB1425 S,E
181	*ET-408841J	TR 2SB1565 E,F
182	ET-414816J	TR 2SC2668 Y T05
183	ET-397160J	TR 2SC3330 R,S,T,U,V
184	*ET-366168	TR 2SD1292 Q,R
185	ET-373025	TR 2SD1944 J1,J2,K
186	*ET-405622J	TR 2SD2061 E,F
187	*ET-408842J	TR 2SD2394 E,F
188	ET-370819	TR.CHIP 2SC3052
189	EV-401032J	VR SLIDE RS30B221J K203X2NO CL
190	EW-389317J	CORD FFC P1.25 L=180 15P
191	EX-405691J	THERMISTOR NTH5D332KA
192	HE-390013J	HEAD E HVFME0020A
193	HR-405340J	HEAD COMBO HVMZA1121A
194	MB-407117J	BELT CAPSTAN (3)
195	MI-404552J1	IDLER (2) PART
196	ML-391745J3	ARM DAMPER
197	ML-387350J1	ARM LID OPENER
198	ML-387277J4	ARM REVIEW PART
199	ML-387402J1	LEVER TRIGGER
200	ML-387316J	MAIN BRAKE (S) PART
201	ML-387318J	MAIN BRAKE (T) PART
202	ML-407119J	REVIEW BRAKE (3) PART
203	ML-404567J1	SLIDER BRAKE (3) PART
204	ML-404944J	SLIDER TRIGGER (2)
205	MP-404852J	PINCH ROLLER (2) PART
206	MR-387406J	HOLDER THRUST WORM
207	MR-391968J	PULLEY TRIGGER (2)
208	MR-407378J1	ROLLER IMPEDANCE (2)
209	MT-404547J1	DISK (3) PART
210	MZ-404577J	DISK CLUTCH (2) PART
211	MZ-404538J	GEAR CAM SLIDER (3)
212	MZ-387335J	GEAR EJECT
213	MZ-387333J1	GEAR FRONT LOADING
214	MZ-404995J1	GEAR MID PART
215	MZ-V1102A090A	GEAR TOGGLE (S) BLK 425EA
216	MZ-V1102A100A	GEAR TOGGLE (T) BLK 425EA
217	MZ-387332J	GEAR WORM WHEEL
218	MZ-409537J	GEAR WORM (2) PART

2. HEAD DRUM BLOCK

Ref. No.	Part No.	Description
1	BV-V1123A410E	LOWER DRUM BLK F1010EA-D
2	BV-V1123A420F	UPPER DRUM BLK F1010EA-D
3	ZS-321298	BID30X08STL CMT
4	SZ-409329J	HOLDER FPC (2)
5	ZS-358936	ST BID30X06STL CMT
6	MA-387474J3	BASE DRUM
7	ZS-563444	BID26X08STL CMT
8	BM-401296J1	MOTOR E20EL89 [DRUM MOTOR]
9	ZS-467796	PAN26X12STL CMT
11	ZS-379350	PAN30X06STL CMT
12	ZS-336714	ST BID30X12STL CMT
13	VT-401282J	EARTH BRUSH PART AG
14	ZS-409216J	ST PAN30X07STL CMT C080

NOTE:

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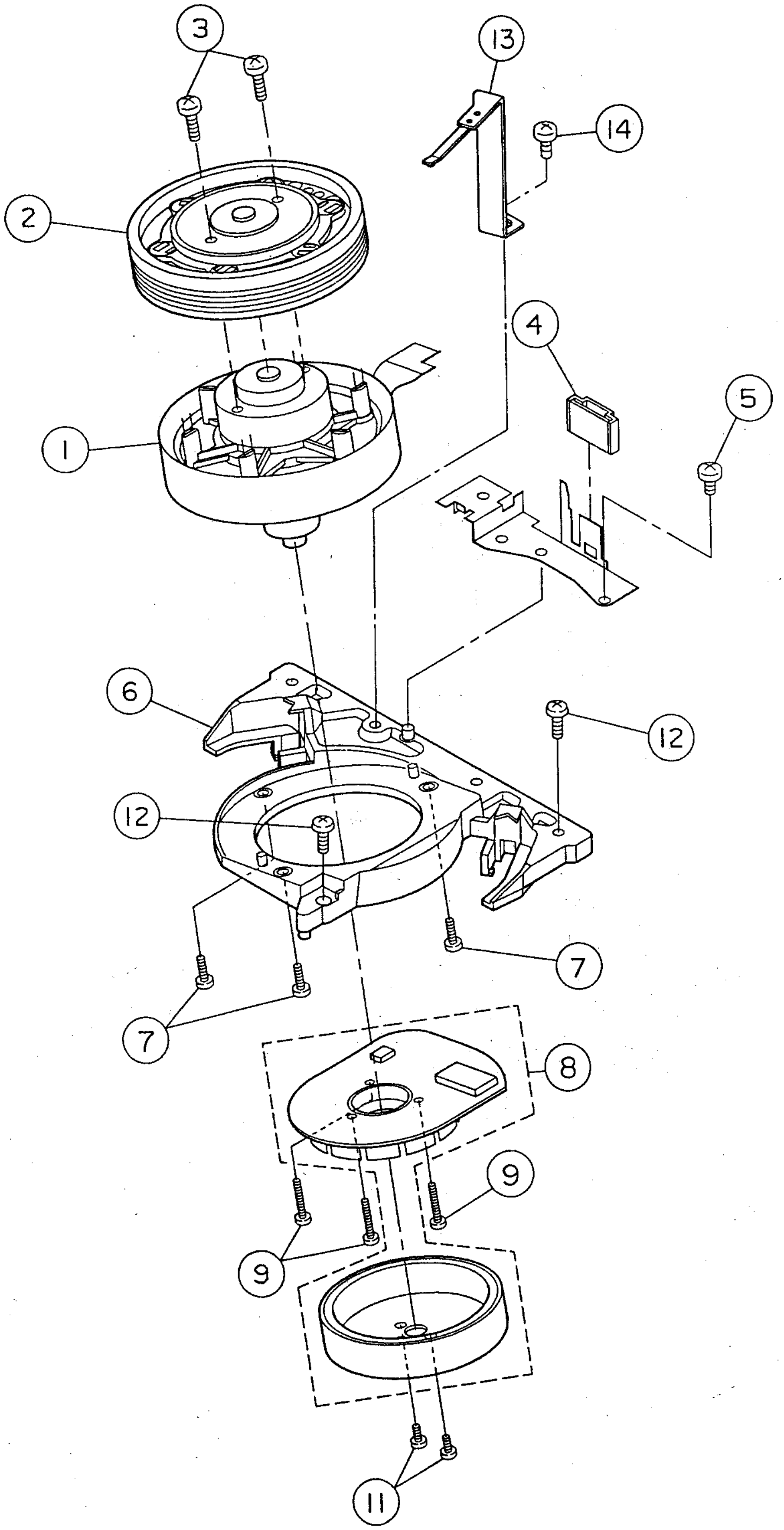
HEAD DRUM BLOCK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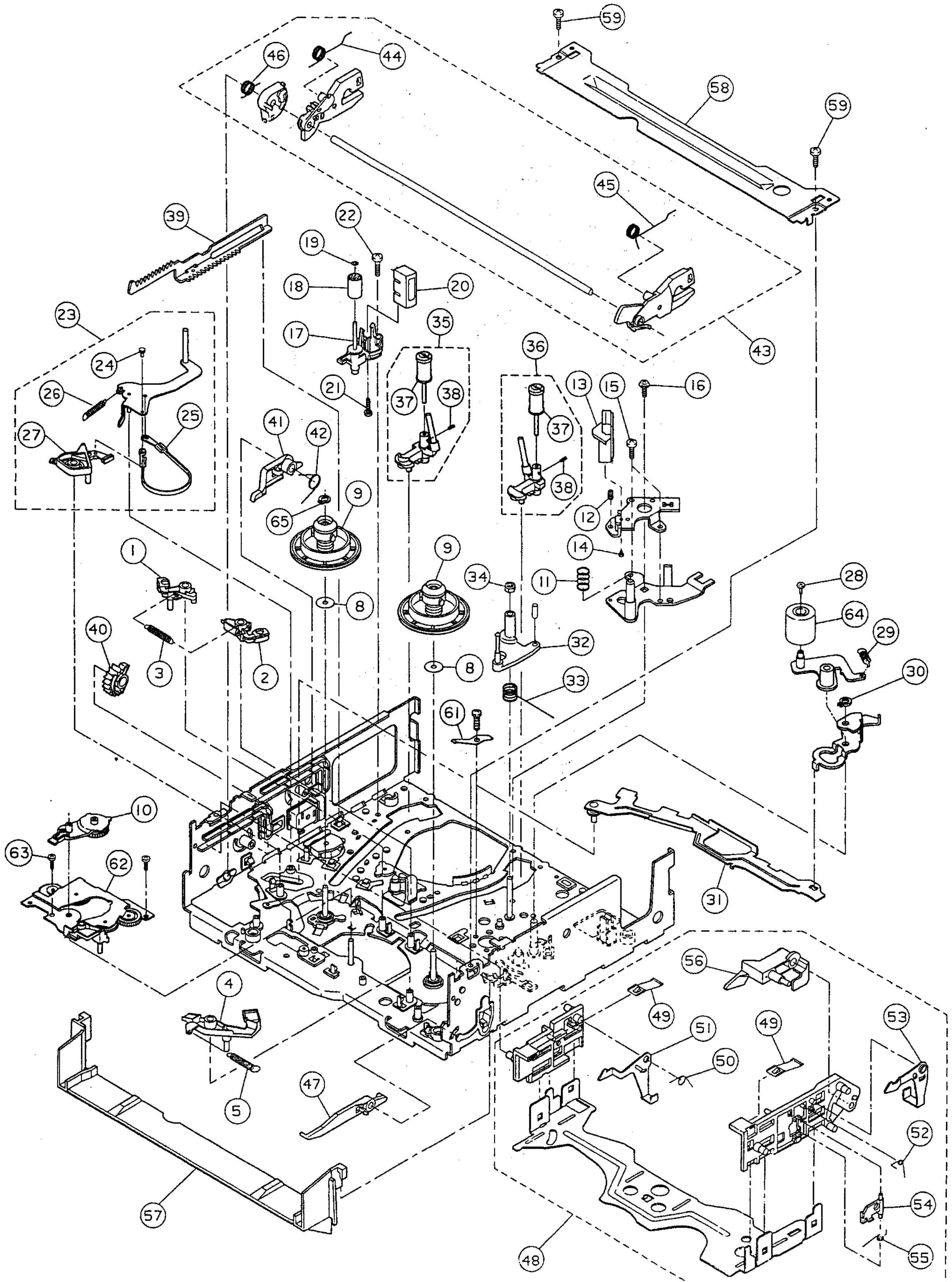
MECHANISM BLOCK (1)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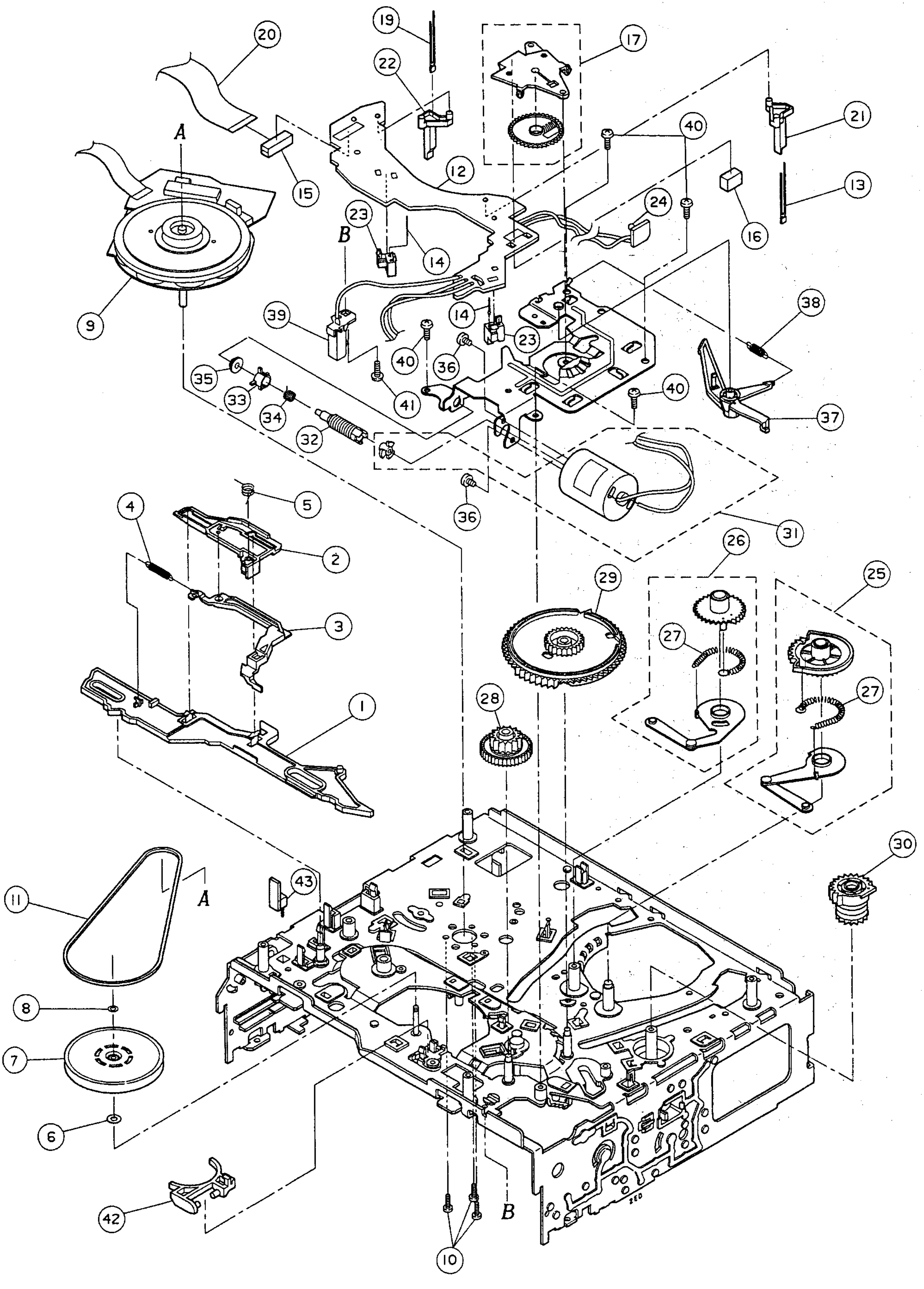
3. MECHANISM BLOCK (1)

Ref. No.	Part No.	Description
1	ML-387316J	MAIN BRAKE (S) PART
2	ML-387318J	MAIN BRAKE (T) PART
3	ZG-387320J	SP PULL MAIN BRAKE
4	ML-407119J	REVIEW BRAKE (3) PART
5	ZG-387323J	SP PULL REVIEW BRAKE
8	ZW-389814J	PW31X110X050PSL
9	MT-404547J1	DISK (3) PART
10	MI-404552J1	IDLER (2) PART
11	ZG-387438J1	SP PUSH A/C
12	ZS-410851J	PAN30X070STL CMT CP
13	HR-405340J	HEAD COMBO HVMZA1121A
14	ZS-404844J	PAN20X02STL BZN PS1
15	ZS-321298	BID30X08STL CMT
16	ZS-409216J	ST PAN30X07STL CMT C080
17	MZ-407375J1	HOLDER FE HEAD (2) PART
18	MR-407378J1	ROLLER IMPEDANCE (2)
19	ZW-409602J	SLIT W17X035X025PSL
20	HE-390013J	HEAD E HVFME0020A
22	ZS-336714	ST BID30X12STL CMT
23	BL-V1123A050B	TENSION ARM BLK F10101EOH-D
24	SZ-387263J4	HOLDER LEVER TENSION
25	ML-390768J4	TENSION BAND PART
26	ZG-395470J	SP PULL TENSION (2)
27	MZ-395471J3	TENSION BRAKE PART
28	ZS-464703	BID20X04STL CMT
29	ZG-404846J	SP PULL PINCH
30	ZW-332843	RETAINING RING GRIP 380STL ACP
31	ML-387431J1	SLIDER PINCH PART
32	ML-387277J4	ARM REVIEW PART
33	ZG-387282J	SP TORSION REVIEW
34	ZW-401776J	NUT REVIEW
35	BV-V1102A070A	LEADER S BLK 425EA
36	BV-V1102A080A	LEADER T BLK 425EA
37	VT-387394J1	GUIDE ROLLER D8 PART
38	ZS-374458	6SET20X030SCM PKR FP
39	ML-387428J	SLIDER FRONT LOADING
40	MZ-387335J	GEAR EJECT
41	ML-391745J3	ARM DAMPER
42	ZG-395567J	SP TORSION ARM DAMPER
43	BL-V1102A140A	ARM LOADING BLK 425EA
44	ZG-387417J	SP TORSION LOAD (S)
45	ZG-387418J	SP TORSION LOAD (T)
46	ZG-392831J1	SP TORSION JOINT (2)
47	ML-387350J1	ARM LID OPENER
48	BV-V1102A150A	CASSETTE LOAD BLK 425EA
49	ZG-387348J1	SP PLATE HOLDER
50	ZG-387421J	SP TORSION DAMPER (S)
51	ML-387345J	LEVER DAMPER (S)
52	ZG-388290J1	SP TORSION DAMPER (T)
53	ML-387346J1	LEVER DAMPER (T)
54	ML-387344J	LEVER LOCK RELEASE
55	ZG-387420J1	SP TORSION RELEASE
56	ML-387349J2	ARM SHUTTER
57	SE-395554J1	GUIDE FRONT (2)
58	MZ-406134J	PLATE UPPER (2)
59	ZS-358936	ST BID30X06STL CMT
61	ZG-392294J	SP PLATE EARTH
62	MZ-404995J1	GEAR MID PART
63	ZS-321194	ST PAN26X05STL CMT
64	MP-404852J	PINCH ROLLER (2) PART
65	ZW-336603	RETAINING RING GRIP 285SUP ACP
70	BB-V1130A020F	MECHA DECK BLK F1010EOH-D

NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

MECHANISM BLOCK (2)



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4. MECHANISM BLOCK (2)

Ref. No.	Part No.	Description
1	ML-404567J1	SLIDER BRAKE (3) PART
2	ML-404944J	SLIDER TRIGGER (2)
3	ML-387402J1	LEVER TRIGGER
4	ZG-387468J	SP PULL SLIDER
5	ZG-387403J	SP TORSION COUPLING
6	ZW-389923J	PW26X060X050PSL
7	MZ-404577J	DISK CLUTCH (2) PART
8	ZW-387492J	SLIT W21X040X050PSL
9	BM-400682J3	MOTOR DFX-67B3VWB2 [CAPSTAN MOTOR]
10	ZS-365149	PT BID26X06STL CMT
11	MB-407117J	BELT CAPSTAN (3)
12	EA-404543J	PC (#) SENSOR (2) KFX
13	ED-390011J	D LED GL451 INFRARED [D1]
14	ET-403420J	DETECTOR SG-105LF [PH1][PH2]
15	EJ-387497J	SOCKET HOUSING 5062-30-10-13 [PS1]
16	EJ-381837J	SOCKET 174074-5 5P [P1]
17	ES-387465J	SW MODE SELECT MMS00070ZLBO [SW1]
19	ET-390009J	TR PHOTO PT493F [TR4]
20	EW-389313J	CORD FFC P1.25 L=120 13P [WP1]
21	MZ-387430J	HOLDER D-LED
22	MZ-387445J	HOLDER S SENSOR
23	MZ-404542J	HOLDER PHOTO SENSOR (2)
24	ET-361490	TR PHOTO PN268 [TR1]
25	MZ-V1102A090A	GEAR TOGGLE (S) BLK 425EA
26	MZ-V1102A100A	GEAR TOGGLE (T) BLK 425EA
27	ZG-387413J1	SP PULL TOGGLE
28	MZ-387332J	GEAR WORM WHEEL
29	MZ-404538J	GEAR CAM SLIDER (3)
30	MZ-387333J1	GEAR FRONT LOADING
31	BM-387503J	MOTOR PART [LOADING MOTOR]
32	MZ-409537J	GEAR WORM (2) PART
33	MR-391968J	PULLEY TRIGGER (2)
34	ZG-387443J	SP TRIGGER
35	MR-387406J	HOLDER THRUST WORM
36	ZS-425981	BID30X03STL CMT
37	BL-387458J2	CAPSTAN BRAKE PART
38	ZG-387502J	SP PULL CAPSTAN BRAKE
39	ES-373099	SW LEAF MTS10110MPC1
40	ZS-389950J	PT BID26X10STL CMT
41	ZS-358936	ST BID30X06STL CMT
42	ML-387311J2	ARM COUPLING
43	ES-416839J	SW MICRO MPU10240MMB0

NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

5. P.C. BOARD BLOCK

Ref. No.	Part No.	Description
1-A	BA-V1154Q600K	FR PC (#) MAIN BLK F1000EK-2VN/FR [EK]
1-B	BA-V1154Q600L	FR PC (#) MAIN BLK F1000EOG-2VD/FR [EOG]
2-A	BA-V1154A610A	PC PRE AMP BLK F1000EK-VN [EK]
2-B	BA-V1154A610B	PC PRE AMP BLK F1010EOH-D [EOG]
3-A	BA-V1154Q620K	FRPC OPERATION (1) BLK F1000EK2VN/FR [EK]
3-B	BA-V1154Q620L	FRPC OPERATION1BLK F1000EOG2VD/FR [EOG]
4-A	BA-V1154A630A	PC (#) OPERATION (2) BLK F1000EK-VN [EK]
4-B	BA-V1154A630B	PC (#) OPERATION (2) BLK F1000EOG-VD [EOG]
5-A	BA-V1154A500A	PC (#) POWER (1) BLK F1000EK-VN [EK]
5-B	BA-V1154A500B	PC (#) POWER (1) BLK F1000EOG-VD (V) [EOG]
6-A	BA-V1154A650A	PC (#) D-NICAM BLK F1000EK-VN [EK]
6-B	BA-V1154A660A	PC D-MULTI BLK F1010EOH-D [EOG]
7-A	BA-V1154A720A	PC (#) IN-OUT BLK F1000EK-VN [EK]
7-B	BA-V1154Q690E	FRPC (#) CANAL PLUS BLK F1000EOG2VD/FR [EOG]

PC (#) MAIN BLK CONSISTS OF FOLLOWING P.C BOARDS.
- MAIN P.C BOARD
- VIDEO P.C BOARD

PC (#) OPERATION (2) BLK CONSISTS OF FOLLOWING P.C BOARDS.
- OPERATION (2) P.C BOARD
- FRONT P.C BOARD
- VR P.C BOARD

PC (#) POWER BLK CONSISTS OF FOLLOWING P.C BOARDS.
- POWER SUPPLY (1) P.C BOARD
- POWER SUPPLY (2) P.C BOARD

PC (#) IN-OUT BLK CONSISTS OF FOLLOWING P.C BOARDS.
- IN-OUT (A) P.C BOARD
- IN-OUT (B) P.C BOARD

PC (#) CANAL PLUS BLK CONSISTS OF FOLLOWING P.C BOARDS.
- CANAL PLUS (A) P.C BOARD
- CANAL PLUS (B) P.C BOARD

6. MAIN P.C. BOARD

Ref. No.	Part No.	Description
C110	*EC-391843J	C DOUBLE FYD0H223Z 5.5DC
D1	ED-307572	D SILICON H 1SS131 [EOG]
D2	ED-307572	D SILICON H 1SS131 [EOG]
D5	ED-307572	D SILICON H 1SS131 [EOG]
D6	ED-307572	D SILICON H 1SS131 [EOG]
D7	ED-307572	D SILICON H 1SS131 [EOG]
D8	ED-307572	D SILICON H 1SS131 [EOG]
D9	ED-307572	D SILICON H 1SS131 [EOG]
D10	ED-307572	D SILICON H 1SS131
D11	ED-307572	D SILICON H 1SS131
D12	ED-387765J	D ZENER H HZS9C1L
D13	ED-307572	D SILICON H 1SS131
D14	ED-408915J	D ZENER H HZS5A2
D16	ED-387919J	D ZENER H HZS6A1L
D17	ED-307572	D SILICON H 1SS131
D18	ED-307572	D SILICON H 1SS131
D19	ED-307572	D SILICON H 1SS131
D70	ED-388368J	D ZENER H HZS9B3L
D71	ED-307572	D SILICON H 1SS131
D101	ED-397233J	D ZENER H HZS5C3
D102	ED-397399J	D ZENER H HZS3C3
D108	ED-387783J	D ZENER H HZS6C3L
D110	ED-403743J	D ZENER H HZS6B3
D112	ED-391005J	D ZENER H HZS12B1
D200	ED-307572	D SILICON H 1SS131
D201	ED-388368J	D ZENER H HZS9B3L
D203	ED-397399J	D ZENER H HZS3C3 [EK]
D204	ED-307572	D SILICON H 1SS131
D205	ED-307572	D SILICON H 1SS131
D206	ED-307572	D SILICON H 1SS131
D207	ED-307572	D SILICON H 1SS131
D208	ED-307572	D SILICON H 1SS131
D209	ED-307572	D SILICON H 1SS131
D210	ED-389686J	D ZENER H HZS2C2
D211	ED-400166J	D ZENER H HZS3B2
D212	ED-307572	D SILICON H 1SS131
D213	ED-307572	D SILICON H 1SS131 [EK]
D214	ED-387919J	D ZENER H HZS6A1L [EK]
D300	ED-307572	D SILICON H 1SS131
D301	ED-307572	D SILICON H 1SS131
D302	ED-307572	D SILICON H 1SS131
D303	ED-307572	D SILICON H 1SS131
D304	ED-387919J	D ZENER H HZS6A1L
D305	ED-387919J	D ZENER H HZS6A1L
D401	ED-307572	D SILICON H 1SS131
D402	ED-307572	D SILICON H 1SS131
D403	ED-387763J	D ZENER H HZS7B3L
D404	ED-388368J	D ZENER H HZS9B3L
D405	ED-307572	D SILICON H 1SS131
D406	ED-307572	D SILICON H 1SS131
D407	ED-307572	D SILICON H 1SS131
D408	ED-307572	D SILICON H 1SS131
D409	ED-307572	D SILICON H 1SS131
D410	ED-307572	D SILICON H 1SS131
D411	ED-307572	D SILICON H 1SS131
D412	ED-307572	D SILICON H 1SS131
D413	ED-307572	D SILICON H 1SS131
D414	ED-307572	D SILICON H 1SS131
D415	ED-307572	D SILICON H 1SS131
D416	ED-511907	D SILICON 1N4002 100/1.0A
D417	ED-511907	D SILICON 1N4002 100/1.0A
D501	ED-307572	D SILICON H 1SS131
FL200	EO-408440J	COIL OSC 1 125-8020-41 70.0KHZ
FL300	EH-394984J	FILTER LC BP SFB41743
FR200	*ER-401039J	R FUSE V T05 ERD2FCV 1/4W 4R7J
FR401	*ER-400729J	R FUSE V T05 RF25SCVTP1/4WR47K
IB300	EH-378541J	COMP R RGLE3X 473J
IB302	EH-378541J	COMP R RGLE3X 473J
IC1	EI-390053J	IC LA7910 [EOG]
IC2	EI-389622J	IC L5631
IC200	EI-388360J	IC BA7765AS
IC300	EI-394983J	IC BA7703K1
IC301	EI-364896	IC BA6138
IC401	EI-404505J1	IC MN675201A-XDZ JTASYP2
IC402	EI-403233J	IC LB1641
IC403	EI-400756J	IC NJM4558L-B
IC404	EI-373981J1	IC BA10393N
IC405	EI-373955	IC S-8053ALR
IC406	EI-405224J	IC ST24C02AB1/AAB
IC501	EI-405722J	IC UPD6450CX-515
IC502	EI-403469J	IC MM1068XS
IF1-A	BV-408937J	VIF UNIT JTX EK [EK]
IF1-B	BV-408938J	VIF UNIT JTX EOG [EOG]
MD1-A	BV-403410J	RF CONVERTER MDLK6B733A EK [EK]
MD1-B	BV-403409J	RF CONVERTER MDLK6D755A EO [EOG]
L2	EO-351869	COIL FIX 1 LAP02 F05 820K [EOG]
L200	EO-354600	COIL FIX 1 LAP02 F05 101K
L201	EO-390717J	COIL FIX 1 LHL06TB T05 103J
L202	EO-351866	COIL FIX 1 LAP02 F05 330K
L203	EO-354600	COIL FIX 1 LAP02 F05 101K
L300	EO-354600	COIL FIX 1 LAP02 F05 101K
L301	EO-354600	COIL FIX 1 LAP02 F05 101K
L302	EO-354600	COIL FIX 1 LAP02 F05 101K
L303	EO-354600	COIL FIX 1 LAP02 F05 101K
L401	EO-381196J	COIL FIX 1 EL0405SKI 470K
L402	*EO-345881	COIL FIX 1 EL0606SKI 101J
L403	EO-354600	COIL FIX 1 LAP02 F05 101K
L404	EO-354600	COIL FIX 1 LAP02 F05 101K
L405	EO-388087J	COIL FIX 1 LF-5.0S F05 331K
L406	EO-354600	COIL FIX 1 LAP02 F05 101K
L501	EO-345876	COIL FIX 1 EL0606SKI 470J
L502	EO-351866	COIL FIX 1 LAP02 F05 330K
L503	EO-345881	COIL FIX 1 EL0606SKI 101J
L504	EO-351866	COIL FIX 1 LAP02 F05 330K
L505	EO-345881	COIL FIX 1 EL0606SKI 101J
L506	EO-345881	COIL FIX 1 EL0606SKI 101J
L507	EO-410089J	COIL FIX 1 SPT0203SA T26 6R8J
R449	*ER-403405J	R OMF H S12 FS 1W R75J
TR1	ET-353899	TR 2SA1317 S,T,U
TR2	ET-397160J	TR 2SC3330 R,S,T,U,V
TR3	ET-353899	TR 2SA1317 S,T,U [EK]
TR4	ET-356236	TR FET 2SK363 GR,BL [EOG]
TR5	ET-397160J	TR 2SC3330 R,S,T,U,V [EOG]
TR6	ET-382952J	TR DTC123ES
TR7	ET-370310	TR DTC144TS [EOG]
TR9	ET-414816J	TR 2SC2668 Y T05
TR10	ET-388338J	TR 2SB1425 S,E
TR11	*ET-405622J	TR 2SD2061 E,F
TR13	ET-397160J	TR 2SC3330 R,S,T,U,V
TR14	ET-397160J	TR 2SC3330 R,S,T,U,V
TR15	ET-353899	TR 2SA1317 S,T,U
TR18	ET-388338J	TR 2SB1425 S,E
TR19	ET-354414	TR DTC144ES
TR20	ET-394881J	TR DTC114WS
TR21	ET-354414	TR DTC144ES
TR23	ET-397160J	TR 2SC3330 R,S,T,U,V [EOG]
TR24	ET-397160J	TR 2SC3330 R,S,T,U,V
TR70	*ET-366168	TR 2SD1292 Q,R
TR103	ET-397160J	TR 2SC3330 R,S,T,U,V
TR104	ET-356336	TR DTA114ES
TR200	ET-366168	TR 2SD1292 Q,R
TR201	ET-397160J	TR 2SC3330 R,S,T,U,V
TR202	ET-397160J	TR 2SC3330 R,S,T,U,V
TR203	ET-397160J	TR 2SC3330 R,S,T,U,V [EK]
TR204	ET-354414	TR DTC144ES [EK]
TR205	ET-360399	TR DTC114TS [EK]
TR207	*ET-353899	TR 2SA1317 S,T,U
TR208	ET-364040	TR UN421D

Ref. No.	Part No.	Description
TR209	ET-397160J	TR 2SC3330 R,S,T,U,V
TR210	ET-356336	TR DTA114ES
TR211	ET-397160J	TR 2SC3330 R,S,T,U,V
TR212	ET-397160J	TR 2SC3330 R,S,T,U,V
TR213	ET-354414	TR DTC144ES
TR214	ET-354414	TR DTC144ES
TR300	ET-397160J	TR 2SC3330 R,S,T,U,V
TR301	ET-353899	TR 2SA1317 S,T,U
TR302	ET-397160J	TR 2SC3330 R,S,T,U,V
TR303	ET-397160J	TR 2SC3330 R,S,T,U,V
TR304	ET-360399	TR DTC114TS
TR305	ET-360399	TR DTC114TS
TR306	ET-356336	TR DTA114ES
TR307	ET-353897	TR DTC114ES
TR308	ET-353897	TR DTC114ES
TR309	ET-363953	TR DTA114TS
TR312	ET-353897	TR DTC114ES
TR401	ET-354414	TR DTC144ES
TR402	ET-354414	TR DTC144ES
TR403	ET-397160J	TR 2SC3330 R,S,T,U,V
TR404	ET-354414	TR DTC144ES
TR405	ET-388338J	TR 2SB1425 S,E
TR407	ET-354414	TR DTC144ES
TR408	ET-373985	TR DTA144TS
TR409	ET-373985	TR DTA144TS
TR410	ET-373985	TR DTA144TS
TR411	ET-354414	TR DTC144ES
TR501	ET-356336	TR DTA114ES [EOG]
TR502	ET-356336	TR DTA114ES [EOG]
TR503	ET-397160J	TR 2SC3330 R,S,T,U,V
TR504	ET-354414	TR DTC144ES
TR505	ET-353899	TR 2SA1317 S,T,U
TR506	ET-397160J	TR 2SC3330 R,S,T,U,V [EOG]
TR507	ET-354414	TR DTC144ES [EOG]
TR508	ET-353899	TR 2SA1317 S,T,U
TR509	ET-353899	TR 2SA1317 S,T,U
TR510	ET-353899	TR 2SA1317 S,T,U
TU1-A	EE-387607J1	TV TUNER TERB1-008B EK [EK]
TU1-B	EE-387604J3	TV TUNER TERE1-007D EOG [EOG]
VC501	EC-412084J	C S-FIX H T05 TZ03R 5.2-30
VR200	EV-389477J	R S-FIX H T05EVNDXAA03 0.1W104
VR201	EV-389480J	R S-FIX H T05EVNDXAA03 0.1W332
VR300	EV-397066J	R S-FIX H T05EVNDXAA03 0.1W333
VR301	EV-389476J	R S-FIX H T05EVNDXAA03 0.1W103
VR302	EV-397066J	R S-FIX H T05EVNDXAA03 0.1W333
VR303	EV-389476J	R S-FIX H T05EVNDXAA03 0.1W103
VR304	EV-389476J	R S-FIX H T05EVNDXAA03 0.1W103
VR305	EV-389478J	R S-FIX H T05EVNDXAA03 0.1W153
VR306	EV-389478J	R S-FIX H T05EVNDXAA03 0.1W153
VR401	EV-397066J	R S-FIX H T05EVNDXAA03 0.1W333
X401	EI-414624J	OSC X'TAL APS-1002 8.000MHZ
X501	EI-416872J	OSC X'TAL APS1004A 17.734475MH
X502	EI-403467J	OSC CE CSB500F40 15.680KHZ

7. VIDEO P.C. BOARD

Ref. No.	Part No.	Description
D601	ED-360318	D SILICON H MA700
D602	ED-307572	D SILICON H 1SS131
D603	ED-307572	D SILICON H 1SS131
D604	ED-307572	D SILICON H 1SS131
D605	ED-307572	D SILICON H 1SS131
D606	ED-307572	D SILICON H 1SS131
D607	ED-307572	D SILICON H 1SS131
D608	ED-307572	D SILICON H 1SS131
D609	ED-307572	D SILICON H 1SS131
D610	ED-307572	D SILICON H 1SS131
D611	ED-307572	D SILICON H 1SS131
D701	ED-307572	D SILICON H 1SS131
D702	ED-307572	D SILICON H 1SS131
D703	ED-307572	D SILICON H 1SS131
D704	ED-307572	D SILICON H 1SS131
D790	ED-378530J	D ZENER H HZS6B2L
D801	ED-307572	D SILICON H 1SS131
D802	ED-307572	D SILICON H 1SS131
D881	ED-307572	D SILICON H 1SS131
D882	ED-307572	D SILICON H 1SS131
DL800	EH-416491J	DL EFDJLA13A
FL600	EH-402170J	FILTER LC LP SEL-5065
FL770	EH-394858J	FILTER LC LP MYV-2V2
FL800	EH-364045	FILTER LC FF-78P
FL870	EH-366894	FILTER CE SFE-4.16MB 4.16MHZ [EOG]
IC600	EI-396454J	IC AN3267K
IC700	EI-394951J	IC LB1215
IC701	EI-201940	IC NJM4558S
IC770	EI-394856J	IC LC8992
IC800	EI-394839J	IC LA7332
IC870	EI-366892	IC BA7025L [EOG]
IC880	EI-373981J1	IC BA10393N
L601	EO-345880	COIL FIX 1 EL0606SKI 820J
L602	EO-410091J	COIL FIX 1 SPT0203SA T26 100J
L603	EO-410094J	COIL FIX 1 SPT0203SA T26 180J
L605	EO-354600	COIL FIX 1 LAP02 F05 101K
L606	EO-354600	COIL FIX 1 LAP02 F05 101K
L607	EO-354600	COIL FIX 1 LAP02 F05 101K
L608	EO-410103J	COIL FIX 1 SPT0203SA T26 151J
L609	EO-351868	COIL FIX 1 LAP02 F05 470K
L701	EO-345881	COIL FIX 1 EL0606SKI 101J
L772	EO-410089J	COIL FIX 1 SPT0203SA T26 6R8J
L773	EO-345880	COIL FIX 1 EL0606SKI 820J
L774	EO-330244	COIL FIX 1 EL0606SKI 2R2K
L801	EO-345880	COIL FIX 1 EL0606SKI 820J
L802	EO-360555	COIL FIX 1 LAP02 F05 180K [EOG]
L803	EO-388087J	COIL FIX 1 LF-5.0S F05 331K
L804	EO-381197J	COIL FIX 1 EL0405SKI 471K
L805	EO-393331J	COIL FIX 1 EL0405RA T02 390K
L806	EO-353900	COIL FIX 1 LAP02 F05 150K
L807	EO-387799J	COIL FIX 1 EL0405SKI 180K
L808	EO-345880	COIL FIX 1 EL0606SKI 820J
L809	EO-403342J	COIL FIX 1 LAP02 F05 4R7K
L810	EO-345880	COIL FIX 1 EL0606SKI 820J
L811	EO-351868	COIL FIX 1 LAP02 F05 470K
L870	EO-478181	COIL FIX 1 FL09H 153J [EOG]
L871	EO-345880	COIL FIX 1 EL0606SKI 820J [EOG]
L881	EO-351869	COIL FIX 1 LAP02 F05 820K
TR601	ET-354414	TR DTC144ES
TR602	ET-354415	TR DTA144ES
TR603	ET-354414	TR DTC144ES
TR604	ET-397160J	TR 2SC3330 R,S,T,U,V
TR605	ET-354414	TR DTC144ES
TR606	ET-353897	TR DTC114ES
TR608	ET-354415	TR DTA144ES
TR609	ET-353899	TR 2SA1317 S,T,U
TR610	ET-397160J	TR 2SC3330 R,S,T,U,V
TR611	ET-397160J	TR 2SC3330 R,S,T,U,V
TR612	ET-354371	TR DTC124ES
TR613	ET-353899	TR 2SA1317 S,T,U
TR614	ET-353899	TR 2SA1317 S,T,U
TR615	ET-354414	TR DTC144ES
TR616	ET-354414	TR DTC144ES
TR617	ET-364040	TR UN421D

Ref. No.	Part No.	Description
TR701	ET-397160J	TR 2SC3330 R,S,T,U,V
TR702	ET-397160J	TR 2SC3330 R,S,T,U,V
TR703	ET-397160J	TR 2SC3330 R,S,T,U,V
TR704	ET-397160J	TR 2SC3330 R,S,T,U,V
TR705	ET-354414	TR DTC144ES
TR706	ET-397160J	TR 2SC3330 R,S,T,U,V
TR707	ET-397160J	TR 2SC3330 R,S,T,U,V
TR708	ET-397160J	TR 2SC3330 R,S,T,U,V
TR709	ET-397160J	TR 2SC3330 R,S,T,U,V
TR710	ET-353899	TR 2SA1317 S,T,U
TR711	ET-353899	TR 2SA1317 S,T,U
TR712	ET-354414	TR DTC144ES
TR713	ET-354415	TR DTA144ES
TR714	ET-370310	TR DTC144TS
TR771	ET-353899	TR 2SA1317 S,T,U
TR791	ET-356224	TR 2SA1286 G,H,J F05
TR800	ET-354414	TR DTC144ES [EOG]
TR801	ET-354415	TR DTA144ES [EOG]
TR802	ET-397160J	TR 2SC3330 R,S,T,U,V
TR803	ET-397160J	TR 2SC3330 R,S,T,U,V
TR804	ET-397160J	TR 2SC3330 R,S,T,U,V
TR805	ET-397160J	TR 2SC3330 R,S,T,U,V
TR806	ET-397160J	TR 2SC3330 R,S,T,U,V
TR807	ET-397160J	TR 2SC3330 R,S,T,U,V
TR809	ET-353897	TR DTC114ES
TR810	ET-353897	TR DTC114ES
TR811	ET-356336	TR DTA114ES
TR812	ET-397160J	TR 2SC3330 R,S,T,U,V
TR814	ET-353899	TR 2SA1317 S,T,U
TR815	ET-397160J	TR 2SC3330 R,S,T,U,V
TR817	ET-388338J	TR 2SB1425 S,E
TR818	ET-353899	TR 2SA1317 S,T,U
TR871	ET-397160J	TR 2SC3330 R,S,T,U,V [EOG]
TR872	ET-397160J	TR 2SC3330 R,S,T,U,V [EOG]
TR881	ET-397160J	TR 2SC3330 R,S,T,U,V
TR882	ET-397160J	TR 2SC3330 R,S,T,U,V
TR883	ET-353899	TR 2SA1317 S,T,U
TR884	ET-397160J	TR 2SC3330 R,S,T,U,V
VR600	EV-389489J	R S-FIX H T05EVNDXAA03 0.1W472
VR601	EV-389482J	R S-FIX H T05EVNDXAA03 0.1W682
VR602	EV-389480J	R S-FIX H T05EVNDXAA03 0.1W332
VR603	EV-389478J	R S-FIX H T05EVNDXAA03 0.1W153
VR604	EV-389478J	R S-FIX H T05EVNDXAA03 0.1W153
VR770	EV-389476J	R S-FIX H T05EVNDXAA03 0.1W103
X800	EI-381632J	OSC X'TAL 86686 4.433619MHZ

8. IN-OUT (A) P.C. BOARD (EK)

Ref. No.	Part No.	Description
L1	EO-345881	COIL FIX 1 EL0606SKI 101J
PJ1	EJ-389323J	PIN J YKB11-0180 1P YELLOW
PJ2	EJ-389324J	PIN J YKB11-0178 1P RED
PJ3	EJ-389324J	PIN J YKB11-0178 1P RED
PJ4	EJ-389325J	PIN J YKB11-0179 1P WHITE
PJ5	EJ-389325J	PIN J YKB11-0179 1P WHITE
PJ8	EJ-389864J	SOCKET M1817 21P
PJ9	EJ-389864J	SOCKET M1817 21P
TR3	ET-397160J	TR 2SC3330 R,S,T,U,V
TR4	ET-397160J	TR 2SC3330 R,S,T,U,V
TR5	ET-397160J	TR 2SC3330 R,S,T,U,V
TR6	ET-397160J	TR 2SC3330 R,S,T,U,V
1	SP-404383J1	PANEL REAR JACK EK (2)

9. IN-OUT (B) P.C. BOARD (EK)

Ref. No.	Part No.	Description
FR101	*ER-408963J	R FUSE V T05 RF25SCVTP1/4WR33K
IC101	EI-408959J	IC LA7220
IC102	EI-408959J	IC LA7220
IC103	EI-408959J	IC LA7220
IC104	EI-408961J	IC MM1031XS
IC105	EI-386468J	IC BA3308
IC106	EI-394861J	IC LVA521S-2
L102	EO-345881	COIL FIX 1 EL0606SKI 101J
L111	EO-345881	COIL FIX 1 EL0606SKI 101J
TR101	ET-397160J	TR 2SC3330 R,S,T,U,V
TR102	ET-397160J	TR 2SC3330 R,S,T,U,V
TR103	ET-354415	TR DTA144ES
TR104	ET-354414	TR DTC144ES
TR105	ET-397160J	TR 2SC3330 R,S,T,U,V

10. CANAL PLUS (A) P.C. BOARD (EOG)

Ref. No.	Part No.	Description
D101	ED-388358J	D ZENER H HZS5C2
D103	ED-307572	D SILICON H 1SS131
D104	ED-307572	D SILICON H 1SS131
D105	ED-307572	D SILICON H 1SS131
D106	ED-404468J	D ZENER H HZS11C3 T26
IC101	EI-408959J	IC LA7220
IC102	EI-408959J	IC LA7220
IC103	EI-408959J	IC LA7220
IC104	EI-408959J	IC LA7220
IC105	EI-332259	IC TC4052BP
IC106	EI-408964J	IC LA7954
IC107	EI-408959J	IC LA7220
IC108	EI-408961J	IC MM1031XS
IC201	EI-386468J	IC BA3308
L101	EO-345880	COIL FIX 1 EL0606SKI 820J
L102	EO-345880	COIL FIX 1 EL0606SKI 820J
L103	EO-345880	COIL FIX 1 EL0606SKI 820J
L104	EO-345880	COIL FIX 1 EL0606SKI 820J
L105	EO-345880	COIL FIX 1 EL0606SKI 820J
TR61	ET-353899	TR 2SA1317 S,T,U
TR101	ET-397160J	TR 2SC3330 R,S,T,U,V
TR102	ET-397160J	TR 2SC3330 R,S,T,U,V
TR103	ET-397160J	TR 2SC3330 R,S,T,U,V
TR104	ET-397160J	TR 2SC3330 R,S,T,U,V
TR105	ET-397160J	TR 2SC3330 R,S,T,U,V
TR106	ET-397160J	TR 2SC3330 R,S,T,U,V
TR110	ET-397160J	TR 2SC3330 R,S,T,U,V
TR111	ET-397160J	TR 2SC3330 R,S,T,U,V
TR112	ET-353899	TR 2SA1317 S,T,U
TR120	ET-397160J	TR 2SC3330 R,S,T,U,V
TR121	ET-397160J	TR 2SC3330 R,S,T,U,V
TR123	ET-354414	TR DTC144ES
TR124	ET-354414	TR DTC144ES
TR126	ET-397160J	TR 2SC3330 R,S,T,U,V
TR127	ET-397160J	TR 2SC3330 R,S,T,U,V
TR128	ET-373985	TR DTA144TS
TR129	ET-364065	TR DTA144WS
TR130	ET-354414	TR DTC144ES
TR131	ET-373985	TR DTA144TS
TR132	ET-354414	TR DTC144ES
TR133	ET-354414	TR DTC144ES
TR135	ET-394881J	TR DTC114WS
TR136	ET-373985	TR DTA144TS
TR139	ET-397160J	TR 2SC3330 R,S,T,U,V

11. CANAL PLUS (B) P.C. BOARD (EOG)

Ref. No.	Part No.	Description
D1	ED-401099J	D SCHOTTKY MA719 T26 40/0.5A
J1	EJ-389325J	PIN J YKB11-0179 1P WHITE
J2	EJ-389324J	PIN J YKB11-0178 1P RED
J3	EJ-389864J	SOCKET M1817 21P
J4	EJ-389915J	SOCKET M1817-A 21P
J5	EJ-389323J	PIN J YKB11-0180 1P YELLOW
J6	EJ-389325J	PIN J YKB11-0179 1P WHITE
J7	EJ-389324J	PIN J YKB11-0178 1P RED
1	SP-404384J1	PANEL REAR JACK EOG-V (2)

12. VIF UNIT (EOG)

Ref. No.	Part No.	Description
CF1	EH-730625J	FILTER CE SAF38.9MZW70Z
CF2	EH-368948	FILTER CE TPS5.5MW 5.5000MHZ
CF4	EH-732528J	FILTER CE SAW SAF33.4MC70Z
IC1	EI-729997J	IC LA7575
L1	EO-725824J	COIL TRAP 6F16185A1
L2	EO-725825J	COIL TRAP 6F16186A1
L4	EO-392817J	COIL FIX 1 EL0405SKI 1R2K
L6	EO-388160J	COIL FIX 1 EL0405SKI 1R8K
L7	EO-714614	COIL RF 6F16115B1
L8	EO-732656J	COIL OSC 6F16403B1
L9	EO-387781J	COIL FIX 1 EL0405SKI 120K
L10	EO-381196J	COIL FIX 1 EL0405SKI 470K
Q1	ET-725820J	TR CHIP 2SC2735J
Q2	ET-731437J	TR CHIP DTC114EK
Q3	ET-731437J	TR CHIP DTC114EK
Q6	ET-370819	TR.CHIP 2SC3052
VR1	EV-733235J	R S-FIX H VG068TLT 203
VR2	EV-733235J	R S-FIX H VG068TLT 203

13. VIF UNIT (EK)

Ref. No.	Part No.	Description
CF1	EH-714628	FILTER CE SAW SAF39.5MZ70Z
CF2	EH-373919	FILTER CE TPS6.0MB
CF3	EH-416920J	FILTER CE SFT6.0MA
CF4	EH-725827J	FILTER CE SAF32.9MDE70Z
IC1	EI-729997J	IC LA7575
IC2	EI-397123J	IC TA8703S
L3	EO-381187J	COIL FIX 1 EL0405SKI R68M
L4	EO-381188J	COIL FIX 1 EL0405SKI 1R0K
L5	EO-725954J	COIL SIF DET 6F16263A3
L7	EO-714614	COIL RF 6F16115B1
L8	EO-732656J	COIL OSC 6F16403B1
L9	EO-387781J	COIL FIX 1 EL0405SKI 120K
L10	EO-381196J	COIL FIX 1 EL0405SKI 470K
L11	EO-714610	COIL RF 6F16113B1
Q1	ET-725820J	TR CHIP 2SC2735J
Q5	ET-713614	TR CHIP 2SA1235 E,F
Q6	ET-370819	TR.CHIP 2SC3052
VR1	EV-733235J	R S-FIX H VG068TLT 203
VR3	EV-732502J	R S-FIX H RH0636C 103

14. PRE-AMP P.C. BOARD

Ref. No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D3	ED-307572	D SILICON H 1SS131
D4	ED-307572	D SILICON H 1SS131
D5	ED-307572	D SILICON H 1SS131
D150	ED-307572	D SILICON H 1SS131
FL201	EO-408439J	COIL OSC 1 125-8019-31 70.0KHZ
IC1	EI-387586J	IC BA7244BS
IC2	EI-356457	IC BU4013B
IC101	EI-397285J	IC BA7740S
L1	EO-410100J	COIL FIX 1 SPT0203SA T26 560J
L2	EO-410088J	COIL FIX 1 SPT0203SA T26 5R6J
L3	EO-381195J	COIL FIX 1 EL0405SKI 331K
L4	EO-410090J	COIL FIX 1 SPT0203SA T26 8R2J
L5	EO-410094J	COIL FIX 1 SPT0203SA T26 180J
L6	EO-381193J	COIL FIX 1 EL0405SKI 271K
L7	EO-410102J	COIL FIX 1 SPT0203SA T26 820J
L8	EO-345881	COIL FIX 1 EL0606SKI 101J
L9	EO-410096J	COIL FIX 1 SPT0203SA T26 220J
L10	EO-345881	COIL FIX 1 EL0606SKI 101J
L11	EO-345881	COIL FIX 1 EL0606SKI 101J
L12	EO-410103J	COIL FIX 1 SPT0203SA T26 151J
L13	EO-410101J	COIL FIX 1 SPT0203SA T26 680J
L14	EO-376600	COIL FIX 1 LF-5.0S F05 101K
L15	EO-388087J	COIL FIX 1 LF-5.0S F05 331K
L101	EO-403270J	COIL FIX 1 EL0405RA T05 101J
L102	EO-403270J	COIL FIX 1 EL0405RA T05 101J
L150	EO-381189J	COIL FIX 1 EL0405SKI 100K
L151	EO-410093J	COIL FIX 1 SPT0203SA T26 150J
L201	EO-390716J	COIL FIX 1 LHL06TB T05 272J
PS1	EJ-389815J	SOCKET HOUSING 5062-30-10-15
TH1	EX-405691J	THERMISTOR NTH5D332KA
TR1	ET-354414	TR DTC144ES
TR2	ET-353899	TR 2SA1317 S,T,U
TR3	ET-397160J	TR 2SC3330 R,S,T,U,V
TR4	ET-397160J	TR 2SC3330 R,S,T,U,V
TR5	ET-397160J	TR 2SC3330 R,S,T,U,V
TR6	ET-397160J	TR 2SC3330 R,S,T,U,V
TR7	ET-397160J	TR 2SC3330 R,S,T,U,V
TR8	ET-353897	TR DTC114ES
TR9	ET-364040	TR UN421D
TR10	ET-354414	TR DTC144ES
		[EOG]
TR11	ET-360399	TR DTC114TS
TR12	ET-354364	TR DTC143TS
		[EOG]
TR14	ET-397160J	TR 2SC3330 R,S,T,U,V
TR15	ET-397160J	TR 2SC3330 R,S,T,U,V
TR16	ET-353899	TR 2SA1317 S,T,U
TR17	ET-353899	TR 2SA1317 S,T,U
TR18	ET-360399	TR DTC114TS
TR19	ET-364040	TR UN421D
TR20	ET-364040	TR UN421D
TR21	ET-360399	TR DTC114TS
TR22	ET-396488J	TR DTC144EL T05
TR103	ET-354414	TR DTC144ES
TR150	ET-353899	TR 2SA1317 S,T,U
TR151	ET-353899	TR 2SA1317 S,T,U
TR152	ET-353899	TR 2SA1317 S,T,U
TR201	ET-397160J	TR 2SC3330 R,S,T,U,V
VR1	EV-403988J	R S-FIX V T05EVNDCAA03 0.1W102
VR2	EV-403919J	R S-FIX V KVSF639A 0.10W 681
WP1	EW-389317J	CORD FFC P1.25 L=180 15P

15. OPERATION (1) P.C. BOARD

Ref. No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D3	ED-307572	D SILICON H 1SS131
D5	ED-307572	D SILICON H 1SS131 [EOG]
D6	ED-307572	D SILICON H 1SS131 [EOG]
D7	ED-307572	D SILICON H 1SS131 [EOG]
D9	ED-307572	D SILICON H 1SS131 [EK]
D10	ED-307572	D SILICON H 1SS131 [EK]
D12	ED-307572	D SILICON H 1SS131
D13	ED-307572	D SILICON H 1SS131
D14	ED-307572	D SILICON H 1SS131 [EOG]
D16	ED-307572	D SILICON H 1SS131
D17	ED-307572	D SILICON H 1SS131
D18	ED-307572	D SILICON H 1SS131
D19	ED-307572	D SILICON H 1SS131
D20	ED-307572	D SILICON H 1SS131
D21	ED-307572	D SILICON H 1SS131
FL1	EM-408445J	IND FL FV548G CHARACTER
IB1	EH-383119J	COMP R RGLE4X 473J
IB2	EH-397361J	COMP R RGLD7X473J
IC1-A	EI-416979J	IC M38173M6-247FP JT2OPD1 [EK]
IC1-B	EI-416978J	IC M38173M6-246FP JT2OPP1 [EOG]
L1	EO-354600	COIL FIX 1 LAP02 F05 101K
PH1	ET-408988J	DETECTOR SBX1619-52
PS1	EJ-404372J	SOCKET HOUSING 5062-30-10-20
PS3	EJ-404364J	SOCKET HOUSING 5062-30-10-17
SW1	ES-409007J1	SW TACT HKW0606-01-500
SW2	ES-409007J1	SW TACT HKW0606-01-500
SW5	ES-409007J1	SW TACT HKW0606-01-500
SW6	ES-409007J1	SW TACT HKW0606-01-500
SW7	ES-409007J1	SW TACT HKW0606-01-500
SW8	ES-409007J1	SW TACT HKW0606-01-500
SW9	ES-409007J1	SW TACT HKW0606-01-500
SW10	ES-409007J1	SW TACT HKW0606-01-500
SW11	ES-409007J1	SW TACT HKW0606-01-500
SW12	ES-409007J1	SW TACT HKW0606-01-500
SW13	ES-409007J1	SW TACT HKW0606-01-500
SW14	ES-409007J1	SW TACT HKW0606-01-500
TR1	ET-354414	TR DTC144ES
TR2	ET-364060	TR DTC143ES
TR3	ET-408826J	TR DTC143EL T05
TR4	ET-408826J	TR DTC143EL T05
TR5	ET-408826J	TR DTC143EL T05
TR6	ET-408826J	TR DTC143EL T05
TR7	ET-408826J	TR DTC143EL T05
TR8	ET-364060	TR DTC143ES
WP1	EW-404366J	CORD FFC P1.25 L=380 20P
WP3	EW-404367J	CORD FFC P1.25 L=120 17P
X1	EI-368825M	OSC X'TAL C-002RX 32.768KHZ
X2	EI-405327J	OSC CE CST6.00MGW 6.000MHZ

16. OPERATION (2) P.C. BOARD

Ref. No.	Part No.	Description
D4	ED-307572	D SILICON H 1SS131
D6	ED-307572	D SILICON H 1SS131
D7	ED-307572	D SILICON H 1SS131
D9	ED-307572	D SILICON H 1SS131 [EOG]
D12	ED-307572	D SILICON H 1SS131 [EK]
D13	ED-307572	D SILICON H 1SS131
D15	ED-307572	D SILICON H 1SS131
D16	ED-307572	D SILICON H 1SS131
D17	ED-307572	D SILICON H 1SS131
D18	ED-307572	D SILICON H 1SS131
D19	ED-307572	D SILICON H 1SS131
D21	ED-307572	D SILICON H 1SS131
D22	ED-307572	D SILICON H 1SS131
D23	ED-307572	D SILICON H 1SS131
D24	ED-307572	D SILICON H 1SS131
P5	EJ-404365J	SOCKET 6200-267-012-800 26P
SW1	ES-409007J1	SW TACT HKW0606-01-500
SW2	ES-409007J1	SW TACT HKW0606-01-500
SW3	ES-409007J1	SW TACT HKW0606-01-500
SW4	ES-409007J1	SW TACT HKW0606-01-500
SW5	ES-409007J1	SW TACT HKW0606-01-500
SW6	ES-409007J1	SW TACT HKW0606-01-500
SW7	ES-409007J1	SW TACT HKW0606-01-500
SW8	ES-409007J1	SW TACT HKW0606-01-500
SW9	ES-391710J	SW LEAF SPPB51 01-1 NO
SW10	ES-397339J	SW SLIDE ESD-170252
SW11	ES-397339J	SW SLIDE ESD-170252 [EOG]
SW12	ES-397339J	SW SLIDE ESD-170252
SW13	ES-397339J	SW SLIDE ESD-170252 [EK]
SW14	ES-397339J	SW SLIDE ESD-170252
TR2	ET-408827J	TR DTA114TL T05
TR4	ET-408827J	TR DTA114TL T05

17. FRONT P.C. BOARD

Ref. No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D2	ED-307572	D SILICON H 1SS131
L1	EO-354600	COIL FIX 1 LAP02 F05 101K
PJ1	EJ-387623J	PIN J JPJ5022-01-040 1P
PJ2	EJ-396453J	PIN J JPJ5022-01-030 1P
PJ3	EJ-396452J	PIN J JPJ5022-01-020 1P
PJ4	EJ-410383J	PHONE J 2P HSJ1406-01-010 3.5
TR1	ET-397160J	TR 2SC3330 R,S,T,U,V

18. VR P.C. BOARD

Ref. No.	Part No.	Description
VR3	EV-401032J	VR SLIDE RS30B221J K203X2NO CL

19. POWER SUPPLY (1) P.C. BOARD

Ref. No.	Part No.	Description
C1	EC-410495J	C EC V CUT TWSS 682M 16.0DC
C2	EC-410496J	C EC V CUT TWSS 332M 35.0DC
C3	EC-410497J	C EC V CUT TWSS 222M 25.0DC
D1	*ED-511907	D SILICON 1N4002 100/1.0A
D2	*ED-511907	D SILICON 1N4002 100/1.0A
D3	*ED-511907	D SILICON 1N4002 100/1.0A
D4	*ED-511907	D SILICON 1N4002 100/1.0A
D5	*ED-412107J	D SILICON 1N4003 T26 200/1.0A
D6	*ED-412107J	D SILICON 1N4003 T26 200/1.0A
D7	ED-307572	D SILICON H 1SS131
D8	ED-412008J	D ZENER H HZS33-1L T26
D9	ED-408719J	D ZENER H HZS4C2
D10	ED-387762J	D ZENER H HZS36-3L
D11	ED-307572	D SILICON H 1SS131
D13	ED-307572	D SILICON H 1SS131
D14	ED-307572	D SILICON H 1SS131
D15	ED-307572	D SILICON H 1SS131
F1	*EF-601964	FUSE SEMKO T 250V 1.60A
F2	*EF-601301	FUSE SEMKO T 250V 2.00A
F3	*EF-601964	FUSE SEMKO T 250V 1.60A
FR4	*ER-400605J	R FUSE V T05 ERD2FCV 1/4W15R0G
IC1	EI-400756J	IC NJM4558L-B
L1	*EO-419186J	COIL LF PLH11C1811R2P01B1 [EOG]
L2	*EO-339907	COIL LF FKOB160MH16 1000.0UH [EOG]
TR1	*ET-408841J	TR 2SB1565 E,F
TR2	*ET-408842J	TR 2SD2394 E,F
TR3	*ET-404498J	TR 2SB1306 Q,R T05
TR4	*ET-373391	TR DTC143ZS
TR5	ET-404498J	TR 2SB1306 Q,R T05
TR6	ET-373391	TR DTC143ZS
TR7	ET-408842J	TR 2SD2394 E,F

20. POWER SUPPLY (2) P.C. BOARD

Ref. No.	Part No.	Description
D16	ED-307572	D SILICON H 1SS131
D17	ED-307572	D SILICON H 1SS131
D18	ED-410368J	D ZENER H HZS15-3 T26
D19	*ED-394708J	D SILICON RBA402 200/4.0A
TR8	*ET-408842J	TR 2SD2394 E,F
TR9	ET-373025	TR 2SD1944 J1,J2,K
TR10	ET-408842J	TR 2SD2394 E,F

21. NICAM P.C. BOARD (EK)

Ref. No.	Part No.	Description
D1	ED-394936J	D VARACTOR 1SV111
D2	ED-307572	D SILICON H 1SS131
D3	ED-394936J	D VARACTOR 1SV111
D4	ED-394936J	D VARACTOR 1SV111
D5	ED-408721J	D ZENER H HZS2B3
D6	ED-307572	D SILICON H 1SS131
IC1	EI-408930J	IC TDA8732
IC2	EI-394937J	IC CF70124
IC3	EI-397560J	IC SAA7322GP
IC4	EI-393323J	IC M5218AL-771
L1	EO-345881	COIL FIX 1 EL0606SKI 101J
L2	EO-384903J	COIL FIX 1 EL0405SKI 102K
L3	EO-384903J	COIL FIX 1 EL0405SKI 102K
L5	EO-345881	COIL FIX 1 EL0606SKI 101J
L6	EO-345881	COIL FIX 1 EL0606SKI 101J
L7	EO-345881	COIL FIX 1 EL0606SKI 101J
L8	EO-345881	COIL FIX 1 EL0606SKI 101J
L10	EO-345881	COIL FIX 1 EL0606SKI 101J
T1	EH-382829J	FILTER LC BP TH316BQM-2110QDAF
TR1	ET-397160J	TR 2SC3330 R,S,T,U,V
TR3	ET-397160J	TR 2SC3330 R,S,T,U,V
TR5	ET-370310	TR DTC144TS
TR6	ET-360399	TR DTC114TS
TR7	ET-360399	TR DTC114TS
TR8	ET-370310	TR DTC144TS
TR9	ET-373985	TR DTA144TS
TR11	ET-370310	TR DTC144TS
VC2	EC-412083J	C S-FIX H T05 TZ03T 3.0-11
X1	EI-408931J	OSC X'TAL HC-49/U 13104KHZ
X2	EI-408933J	OSC X'TAL HC-49/U 11648KHZ
X3	EI-403347J	OSC X'TAL NR-18-S 16.384MHZ

22. D-MULTI P.C. BOARD (EOG)

Ref. No.	Part No.	Description
D1	ED-364032	D ZENER H HZS10B2J
FL1	EH-394947J	FILTER CE SFT5.74MA
FL2	EH-394948J	FILTER CE SFT5.5MA
FR22	*ER-331619	R FUSE H S10 ERD2FC 1/4W 39R0G
IC1	EI-394949J	IC IR3P72
L1	EO-345881	COIL FIX 1 EL0606SKI 101J
T1	EO-396464J	COIL DET 1 134-5177
T2	EO-394950J	COIL DET 1 134-5176
VR1	EV-396023J	R S-FIX H T05EVNDXAA03 0.1W222
VR2	EV-389479J	R S-FIX H T05EVNDXAA03 0.1W223
VR3	EV-397570J	R S-FIX H T05 RH0638C 0.1 W 105
VR4	EV-396024J	R S-FIX H T05EVNDXAA03 0.1W474
VR5	EV-389477J	R S-FIX H T05EVNDXAA03 0.1W104
VR6	EV-389479J	R S-FIX H T05EVNDXAA03 0.1W223
VR7	EV-389479J	R S-FIX H T05EVNDXAA03 0.1W223

23. VPST/PDC P.C. BOARD

Ref. No.	Part No.	Description
D1	ED-307572	D SILICON H 1SS131
D101	ED-307572	D SILICON H 1SS131
D201	ED-307572	D SILICON H 1SS131
FL101	EH-394684J	FILTER EMI ZBF503D-00TA T05
FL102	EH-394684J	FILTER EMI ZBF503D-00TA T05 [EOG]
IB101	EH-383056J	COMP R RGLE4X 103J
IB102	EH-386637J	COMP R RGLE8X 103J
IC101-A	EI-408432J3	IC UPD75218CW-025 JXVPT4 [EOG]
IC101-B	EI-410521J3	IC UPD75218CW-029 JXPDC4 [EK]
IC102	EI-410265J	IC ST24C04B1
IC103	EI-405224J	IC ST24C02AB1/AAB
IC104	EI-419092J	IC MV1815-2ABA
IC105	EI-410125J	IC V53C464AP-80
IC106	EI-401050J	IC LVA523SA2
IC107	EI-394680J	IC AN3171K
IC108	EI-387019J	IC MC1377P
IC301	EI-385958J	IC SAA4700 [EOG]
L1	EO-345865	COIL FIX 1 EL0606SKI 100J
L101	EO-345865	COIL FIX 1 EL0606SKI 100J
L102	EO-345865	COIL FIX 1 EL0606SKI 100J
L103	EO-345881	COIL FIX 1 EL0606SKI 101J [EOG]
L121	EO-345865	COIL FIX 1 EL0606SKI 100J
L151	EO-410104J	COIL FIX 1 SPT0203SA T26 181J
L152	EO-410104J	COIL FIX 1 SPT0203SA T26 181J
L153	EO-345880	COIL FIX 1 EL0606SKI 820J
L154	EO-410099J	COIL FIX 1 SPT0203SA T26 470J
L155	EO-345865	COIL FIX 1 EL0606SKI 100J
L201	EO-345865	COIL FIX 1 EL0606SKI 100J
L202	EO-345865	COIL FIX 1 EL0606SKI 100J
L203	EO-345875	COIL FIX 1 EL0606SKI 390J
L204	EO-345873	COIL FIX 1 EL0606SKI 270J
L206	EO-345871	COIL FIX 1 EL0606SKI 180J
L207	EO-345874	COIL FIX 1 EL0606SKI 330J
L208	EO-345874	COIL FIX 1 EL0606SKI 330J
L251	EO-345865	COIL FIX 1 EL0606SKI 100J
L301	EO-345865	COIL FIX 1 EL0606SKI 100J [EOG]
TR1	ET-397160J	TR 2SC3330 R,S,T,U,V
TR2	ET-388338J	TR 2SB1425 S,E
TR3	ET-354414	TR DTC144ES
TR101	ET-354415	TR DTA144ES
TR102	ET-397160J	TR 2SC3330 R,S,T,U,V
TR103	ET-364060	TR DTC143ES [EOG]
TR104	ET-354414	TR DTC144ES [EOG]
TR105	ET-388338J	TR 2SB1425 S,E [EOG]
TR151	ET-397160J	TR 2SC3330 R,S,T,U,V
TR152	ET-353899	TR 2SA1317 S,T,U
TR153	ET-353899	TR 2SA1317 S,T,U
TR154	ET-397160J	TR 2SC3330 R,S,T,U,V
TR155	ET-397160J	TR 2SC3330 R,S,T,U,V
TR201	ET-397160J	TR 2SC3330 R,S,T,U,V
TR202	ET-397160J	TR 2SC3330 R,S,T,U,V
TR203	ET-397160J	TR 2SC3330 R,S,T,U,V
TR204	ET-353899	TR 2SA1317 S,T,U
TR208	ET-353899	TR 2SA1317 S,T,U
TR251	ET-397160J	TR 2SC3330 R,S,T,U,V
TR252	ET-353899	TR 2SA1317 S,T,U
TR253	ET-353899	TR 2SA1317 S,T,U
X101	EI-367882J1	OSC CE FCR4.19MC3 4.190MHZ
X102	EI-408433J	OSC X'TAL HC-43/U 27750KHZ
X103	EI-394673J	OSC X'TAL HC-49/U 8867.238KHZ

24. JOG SHUTTLE P.C. BOARD

Ref. No.	Part No.	Description
SW3	ES-409005J	SW ROTARY ENCODER SRGPPJ-1

25. FINAL ASSEMBLY BLOCK

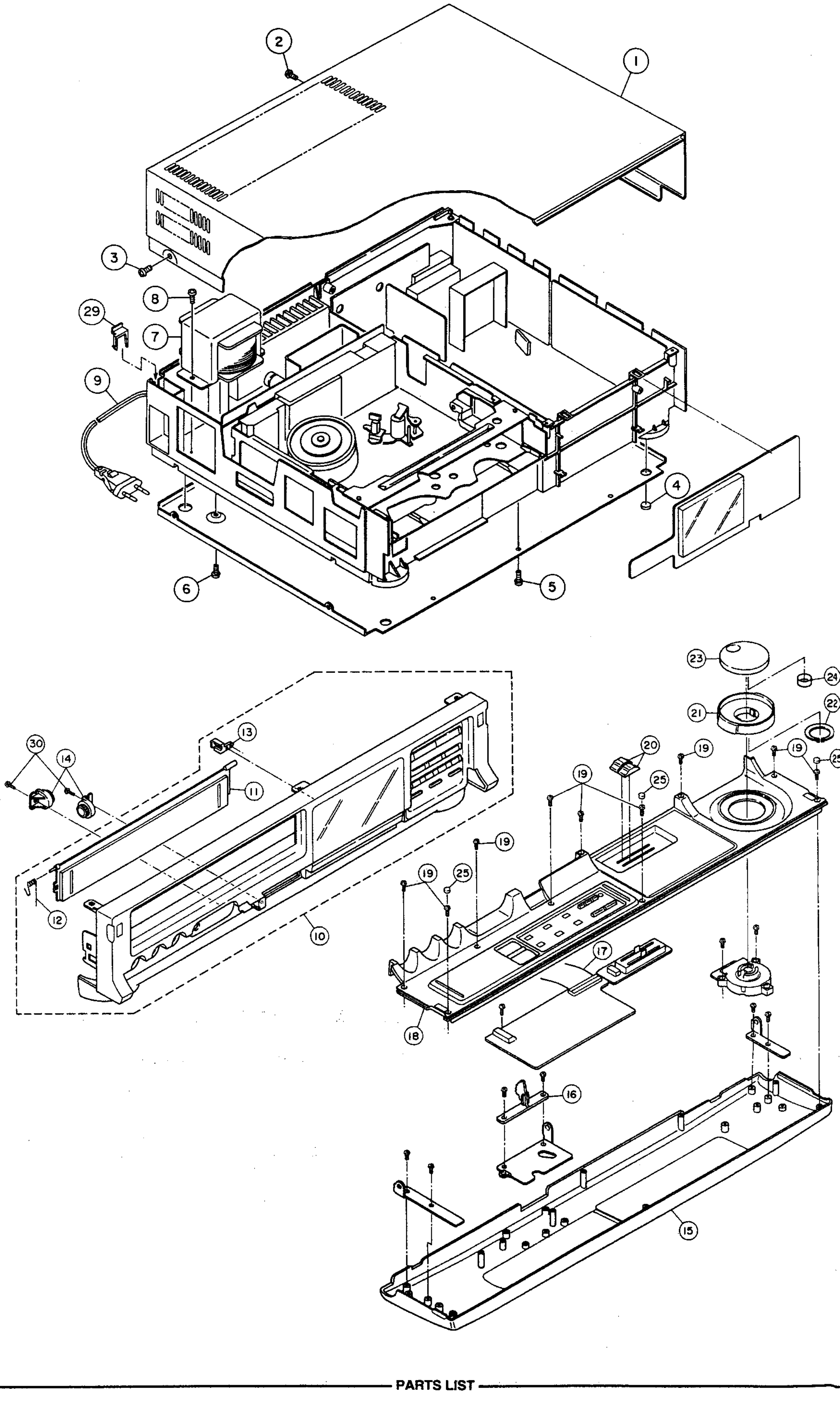
Ref. No.	Part No.	Description
1	SP-409486J	COVER UPPER (JT)
2	ZS-365702	PLX BID30X10STL BNI
3	ZS-361507	DT BID30X06STL BNI
4	SA-395476J	FOOT FRONT
5	ZS-362378	PLX BID30X10STL CMT
6	ZS-358936	ST BID30X06STL CMT
7-A	*BT-408920J	TRANS POW V1154 EA [EK]
7-B	*BT-408921J	TRANS POW V1154 EOG [EOG]
8	ZS-373962	PLX BID40X10STL CMT
9-A	*EW-414845E1	AC CORD 200 *V1164 WITH TUBE B [EK]
9-B	*EW-404002M	AC CORD 200 SE-1 WITH TUBE E [EOG]
10-A	BD-409401J1	PANEL FRONT E1 PART [EK]
10-B	BD-417929J	PANEL FRONT G3 PART [EOG]
11-A	SE-409419J	MASK CASSETTE (D)-E3 [EK]
11-B	SE-418101J	MASK CASSETTE (D)-G6 [EOG]
12	ZG-395386J	SP MASK (2)
13	SZ-409420J	STOPPER MASK (3)
14	SZ-409014J	DAMPER 3F96-F
15-A	SP-409433J	DOOR (A) F1000 E PART [EK]
15-B	SP-417931J	DOOR (A) F1000 G2 PART [EOG]
16	SZ-409447J1	GEAR DAMPER
17	EW-409012J	CORD FFC P1.00 L=100 26P
18-A	SP-409456J4	DOOR (C) E2 PART [EK]
18-B	SP-417933J1	DOOR (C) G3 PART [EOG]
19	ZS-409503J	BT BID20X08STL BZN
20	SK-395423J	KNOB VOL (1)
21-A	SK-409478J	KNOB SHUTTLE [EK]
21-B	SK-417935J	KNOB SHUTTLE (1) [EOG]
22	SZ-408436J	RING C S-19
23-A	SK-409479J	KNOB JOG [EK]
23-B	SK-417937J	KNOB JOG (1) [EOG]
24	SZ-408435J	COMPRESSION RING 10193
25	SZ-409480J	STOPPER DOOR
29	SZ-395478J	COVER AC CORD
30	ZS-357946	PLX PAN30X10STL CMT C080

NOTE:
Parts will not be supplied if they are not listed in the parts list, even if they appear on the assembling illustrations with reference No.

26. ACCESSARY

Ref. No.	Part No.	Description
1	EW-348414	CORD PAL
2-A	AV-B1040A010G	REMOCON BLK RC-V1001E [EK]
2-B	AV-B1040A010H	REMOCON BLK RC-V1001G [EOG]

FINAL ASSEMBLY BLOCK



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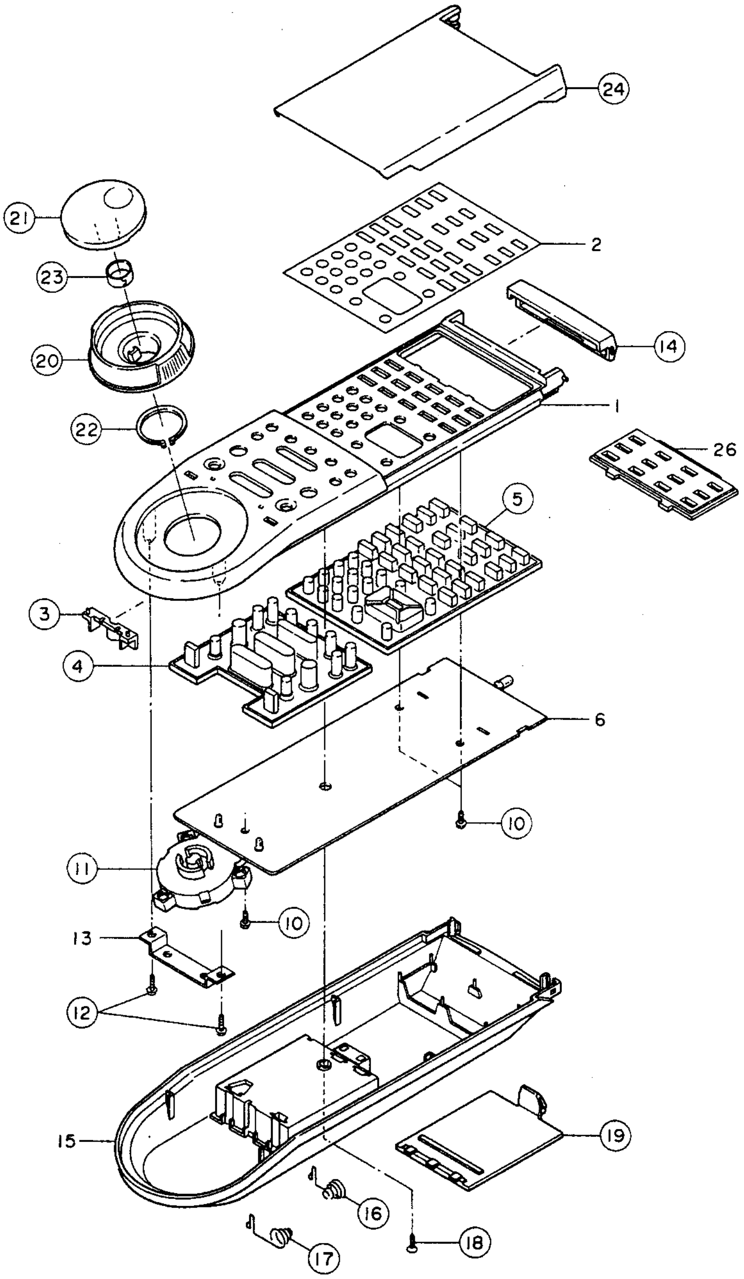
REMOCON RC-V1001E/G



27. REMOCON RC-V1001E/G

Ref. No.	Part No.	Description
3	SE-407612J	LENS (V)
4	MB-412384J	KEY RUBBER (V1)-2
5	MB-407622J1	KEY RUBBER (V2)-A
10	ZS-374389	PT BID20X06STL BNI
11	ES-408428J	SW ROTARY ENCODER SRGPPJ
12	ZS-336614	PT PAN26X08STL CMT
14	SE-407625J	FILTER (V)
16	ZG-407614J1	TERMINAL BATTERY (V3)
17	ZG-407615J1	TERMINAL BATTERY (V4)
18	ZS-409324J	PT CTS26X08STL BNI
19	SC-407627J1	COVER BATTERY (V)
20	SK-407713J	KNOB RING-R
21	SK-407708J	KNOB JOG
22	SZ-408436J	RING C S-19
23	SZ-408435J	COMPRESSION RING 10193
24-A	SP-407635J2	DOOR PANEL (V)-1001E
24-B	SP-407634J2	DOOR PANEL (V)-1001G

28. REMOCON P.C. BOARD RC-V1001

Ref. No.	Part No.	Description
D1	ED-403450J	D LED SE303ARF-C INFRARED
D2	ED-397391J	D LED BR3668S RED
D3	ED-397391J	D LED BR3668S RED
IC1	EI-408449J	IC UPD75004GB-771 JXVPTR1 QF
IC2	EI-400672J	IC S-8052ALB-LE
TR1	ET-413009J	TR CHIP 2SC2884-Y TE12R T12E
X1	EI-408450J	OSC CE CST2.45MGW 2.450MHZ
1	ZG-407616J	TERMINAL BATTERY (V1)
2	ZG-407617J	TERMINAL BATTERY (V2)

INDEX

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
AVB1040A010G	26-2-A	ED307572	6-D401	ED307572	16-D24	EH378541J	6-IB302
AVB1040A010H	26-2-B	ED307572	6-D402	ED307572	17-D1	EH382829J	21-T1
BAV1154A500A	5-5-A	ED307572	6-D405	ED307572	17-D2	EH383056J	23-IB101
BAV1154A500B	5-5-B	ED307572	6-D406	ED307572	19-D7	EH383119J	15-IB1
BAV1154A610A	5-2-A	ED307572	6-D407	ED307572	19-D11	EH386637J	23-IB102
BAV1154A610B	5-2-B	ED307572	6-D408	ED307572	19-D13	EH394684J	23-FL101
BAV1154A630A	5-4-A	ED307572	6-D409	ED307572	19-D14	EH394684J	23-FL102
BAV1154A630B	5-4-B	ED307572	6-D410	ED307572	19-D15	EH394858J	7-FL770
BAV1154A650A	5-6-A	ED307572	6-D411	ED307572	20-D16	EH394947J	22-FL1
BAV1154A660A	5-6-B	ED307572	6-D412	ED307572	20-D17	EH394948J	22-FL2
BAV1154A720A	5-7-A	ED307572	6-D413	ED307572	21-D2	EH394984J	6-FL300
BAV1154Q600K	5-1-A	ED307572	6-D414	ED307572	21-D6	EH397361J	15-IB2
BAV1154Q600L	5-1-B	ED307572	6-D415	ED307572	23-D1	EH402170J	7-FL600
BAV1154Q620K	5-3-A	ED307572	6-D501	ED307572	23-D101	EH416491J	7-DL800
BAV1154Q620L	5-3-B	ED307572	7-D602	ED307572	23-D201	EH416920J	13-CF3
BAV1154Q690E	5-7-B	ED307572	7-D603	ED360318	7-D601	EH714628	13-CF1
BBV1130A020F	3-70	ED307572	7-D604	ED364032	22-D1	EH725827J	13-CF4
BD409401J1	25-10-A	ED307572	7-D605	ED378530J	7-D790	EH730625J	12-CF1
BD417929J	25-10-B	ED307572	7-D606	ED387762J	19-D10	EH732528J	12-CF4
BLV1102A140A	3-43	ED307572	7-D607	ED387763J	6-D403	EI201940	7-IC701
BLV1123A050B	3-23	ED307572	7-D608	ED387765J	6-D12	EI332259	10-IC105
BL387458J2	4-37	ED307572	7-D609	ED387783J	6-D108	EI356457	14-IC2
BM387503J	4-31	ED307572	7-D610	ED387919J	6-D16	EI364896	6-IC301
BM400682J3	4-9	ED307572	7-D611	ED387919J	6-D214	EI366892	7-IC870
BM401296J1	2-8	ED307572	7-D701	ED387919J	6-D304	EI367882J1	23-X101
BT408920J	25-7-A	ED307572	7-D702	ED387919J	6-D305	EI368825M	15-X1
BT408921J	25-7-B	ED307572	7-D703	ED388358J	10-D101	EI373955	6-IC405
BVV1102A070A	3-35	ED307572	7-D704	ED388368J	6-D70	EI373981J1	6-IC404
BVV1102A080A	3-36	ED307572	7-D801	ED388368J	6-D201	EI373981J1	7-IC880
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EA404543J	4-12	ED307572	14-D3	ED394936J	21-D4	EI389622J	6-IC2
EC391843J	6-C110	ED307572	14-D4	ED397233J	6-D101	EI390053J	6-IC1
EC410495J	19-C1	ED307572	14-D5	ED397391J	28-D2	EI393323J	21-IC4
EC410496J	19-C2	ED307572	14-D150	ED397391J	28-D3	EI394673J	23-X103
EC410497J	19-C3	ED307572	15-D1	ED397399J	6-D102	EI394680J	23-IC107
EC412083J	21-VC2	ED307572	15-D3	ED397399J	6-D203	EI394839J	7-IC800
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Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
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EI408959J	9-IC102	EO345880	10-L103	EO396464J	22-T1	ET353897	6-TR307
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EI408959J	10-IC101	EO345880	10-L105	EO403270J	14-L102	ET353897	6-TR312
EI408959J	10-IC102	EO345880	23-L153	EO403342J	7-L809	ET353897	7-TR606
EI408959J	10-IC103	EO345881	6-L402	EO408439J	14-FL201	ET353897	7-TR809
EI408959J	10-IC104	EO345881	6-L503	EO408440J	6-FL200	ET353897	7-TR810
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Part No.	Ref. No.
ET354414	14-TR1
ET354414	14-TR10
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ET354415	7-TR713
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ET354415	9-TR103
ET354415	23-TR101
ET356224	7-TR791
ET356236	6-TR4
ET356336	6-TR104
ET356336	6-TR210
ET356336	6-TR306
ET356336	6-TR501
ET356336	6-TR502
ET356336	7-TR811
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ET360399	14-TR11
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ET360399	21-TR7
ET361490	4-24
ET363953	6-TR309
ET364040	6-TR208
ET364040	7-TR617
ET364040	14-TR9
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ET364060	15-TR2
ET364060	15-TR8
ET364060	23-TR103
ET364065	10-TR129
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ET373391	19-TR6
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ET373985	6-TR409
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ET382952J	6-TR6
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ET390009J	4-19
ET394881J	6-TR20
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ET397160J	23-TR154
ET397160J	23-TR155
ET397160J	23-TR201
ET397160J	23-TR202
ET397160J	23-TR203
ET397160J	23-TR251
ET403420J	4-14
ET404498J	19-TR3
ET404498J	19-TR5
ET405622J	6-TR11
ET408826J	15-TR3
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ET408841J	19-TR1
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ET408842J	20-TR10
ET408988J	15-PH1
ET413009J	28-TR1
ET414816J	6-TR9
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ET731437J	12-Q3
EV389476J	6-VR301
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EV389478J	7-VR603
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EV389479J	22-VR2
EV389479J	22-VR6
EV389479J	22-VR7
EV389480J	6-VR201
EV389480J	7-VR602
EV389482J	7-VR601
EV389489J	7-VR600
EV396023J	22-VR1
EV396024J	22-VR4
EV397066J	6-VR300
EV397066J	6-VR302
EV397066J	6-VR401
EV397570J	22-VR3
EV401032J	18-VR3
EV403919J	14-VR2
EV403988J	14-VR1
EV732502J	13-VR3
EV733235J	12-VR1
EV733235J	12-VR2
EV733235J	13-VR1
EW348414	26-1
EW389313J	4-20
EW389317J	14-WP1
EW404002M	25-9-B
EW404366J	15-WP1
EW404367J	15-WP3
EW409012J	25-17
EW414845E1	25-9-A
EX405691J	14-TH1
HE390013J	3-20
HR405340J	3-13
MA387474J3	2-6
MB407117J	4-11
MB407622J1	27-5
MB412384J	27-4
MI404552J1	3-10
ML387277J4	3-32
ML387311J2	4-42
ML387316J	3-1
ML387318J	3-2
ML387344J	3-54
ML387345J	3-51
ML387346J1	3-53
ML387349J2	3-56
ML387350J1	3-47
ML387402J1	4-3
ML387428J	3-39
ML387431J1	3-31
ML390768J4	3-25
ML391745J3	3-41
ML404567J1	4-1
ML404944J	4-2
ML407119J	3-4
MP404852J	3-64
MR387406J	4-35
MR391968J	4-33
MR407378J1	3-18
MT404547J1	3-9
MZV1102A090A	4-25
MZV1102A100A	4-26
MZ387332J	4-28
MZ387333J1	4-30
MZ387335J	3-40
MZ387430J	4-21
MZ387445J	4-22
MZ395471J3	3-27
MZ404538J	4-29
MZ404542J	4-23
MZ404577J	4-7
MZ404995J1	3-62
MZ406134J	3-58
MZ407375J1	3-17
MZ409537J	4-32
SA395476J	25-4
SC407627J1	27-19
SE395554J1	3-57
SE407612J	27-3
SE407625J	27-14
SE409419J	25-11-A
SE418101J	25-11-B
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SK407713J	27-20
SK409478J	25-21-A
SK409479J	25-23-A
SK417935J	25-21-B
SK417937J	25-23-B
SP404383J1	8-1
SP404384J1	11-1
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SP407635J2	27-24-A
SP409433J	25-15-A
SP409456J4	25-18-A
SP409486J	25-1

Part No.	Ref. No.
SP417931J	25-15-B
SP417933J1	25-18-B
SZ387263J4	3-24
SZ395478J	25-29
SZ408435J	25-24
SZ408435J	27-23
SZ408436J	25-22
SZ408436J	27-22
SZ409014J	25-14
SZ409329J	2-4
SZ409420J	25-13
SZ409447J1	25-16
SZ409480J	25-25
VT387394J1	3-37
VT401282J	2-13
ZG387282J	3-33
ZG387320J	3-3
ZG387323J	3-5
ZG387348J1	3-49
ZG387403J	4-5
ZG387413J1	4-27
ZG387417J	3-44
ZG387418J	3-45
ZG387420J1	3-55
ZG387421J	3-50
ZG387438J1	3-11
ZG387443J	4-34
ZG387468J	4-4
ZG387502J	4-38
ZG388290J1	3-52
ZG392294J	3-61
ZG392831J1	3-46
ZG395386J	25-12
ZG395470J	3-26
ZG395567J	3-42
ZG404846J	3-29
ZG407614J1	27-16
ZG407615J1	27-17
ZG407616J	28-1
ZG407617J	28-2
ZS321194	3-63
ZS321298	2-3
ZS321298	3-15
ZS336614	27-12
ZS336714	2-12
ZS336714	3-22
ZS357946	25-30
ZS358936	2-5
ZS358936	3-59
ZS358936	4-41
ZS358936	25-6
ZS361507	25-3
ZS362378	25-5
ZS365149	4-10
ZS365702	25-2
ZS373962	25-8
ZS374389	27-10
ZS374458	3-38
ZS379350	2-11
ZS389950J	4-40
ZS404844J	3-14
ZS409216J	2-14
ZS409216J	3-16
ZS409324J	27-18
ZS409503J	25-19
ZS410851J	3-12
ZS425981	4-36
ZS464703	3-28
ZS467796	2-9
ZS563444	2-7
ZW332843	3-30
ZW336603	3-65
ZW387492J	4-8
ZW389814J	3-8
ZW389923J	4-6
ZW401776J	3-34
ZW409602J	3-19

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
ET354414	14-TR1	ET397160J	6-TR5	ET397160J	17-TR1	EW404366J	15-WP1
ET354414	14-TR10	ET397160J	6-TR13	ET397160J	21-TR1	EW404367J	15-WP3
ET354414	14-TR103	ET397160J	6-TR14	ET397160J	21-TR3	EW409012J	25-17
ET354414	15-TR1	ET397160J	6-TR23	ET397160J	23-TR1	EW414845E1	25-9-A
ET354414	23-TR3	ET397160J	6-TR24	ET397160J	23-TR102	EX405691J	14-TH1
ET354414	23-TR104	ET397160J	6-TR103	ET397160J	23-TR151	HE390013J	3-20
ET354415	7-TR602	ET397160J	6-TR201	ET397160J	23-TR154	HR405340J	3-13
ET354415	7-TR608	ET397160J	6-TR202	ET397160J	23-TR155	MA387474J3	2-6
ET354415	7-TR713	ET397160J	6-TR203	ET397160J	23-TR201	MB407117J	4-11
ET354415	7-TR801	ET397160J	6-TR209	ET397160J	23-TR202	MB407622J1	27-5
ET354415	9-TR103	ET397160J	6-TR211	ET397160J	23-TR203	MB412384J	27-4
ET354415	23-TR101	ET397160J	6-TR212	ET397160J	23-TR251	MI404552J1	3-10
ET356224	7-TR791	ET397160J	6-TR300	ET403420J	4-14	ML387277J4	3-32
ET356236	6-TR4	ET397160J	6-TR302	ET404498J	19-TR3	ML387311J2	4-42
ET356336	6-TR104	ET397160J	6-TR303	ET404498J	19-TR5	ML387316J	3-1
ET356336	6-TR210	ET397160J	6-TR403	ET405622J	6-TR11	ML387318J	3-2
ET356336	6-TR306	ET397160J	6-TR503	ET408826J	15-TR3	ML387344J	3-54
ET356336	6-TR501	ET397160J	6-TR506	ET408826J	15-TR4	ML387345J	3-51
ET356336	6-TR502	ET397160J	7-TR604	ET408826J	15-TR5	ML387346J1	3-53
ET356336	7-TR811	ET397160J	7-TR610	ET408826J	15-TR6	ML387349J2	3-56
ET360399	6-TR205	ET397160J	7-TR611	ET408826J	15-TR7	ML387350J1	3-47
ET360399	6-TR304	ET397160J	7-TR701	ET408827J	16-TR2	ML387402J1	4-3
ET360399	6-TR305	ET397160J	7-TR702	ET408827J	16-TR4	ML387428J	3-39
ET360399	14-TR11	ET397160J	7-TR703	ET408841J	19-TR1	ML387431J1	3-31
ET360399	14-TR18	ET397160J	7-TR704	ET408842J	19-TR2	ML390768J4	3-25
ET360399	14-TR21	ET397160J	7-TR706	ET408842J	19-TR7	ML391745J3	3-41
ET360399	21-TR6	ET397160J	7-TR707	ET408842J	20-TR8	ML404567J1	4-1
ET360399	21-TR7	ET397160J	7-TR708	ET408842J	20-TR10	ML404944J	4-2
ET361490	4-24	ET397160J	7-TR709	ET408988J	15-PH1	ML407119J	3-4
ET363953	6-TR309	ET397160J	7-TR802	ET413009J	28-TR1	MP404852J	3-64
ET364040	6-TR208	ET397160J	7-TR803	ET414816J	6-TR9	MR387406J	4-35
ET364040	7-TR617	ET397160J	7-TR804	ET713614	13-Q5	MR391968J	4-33
ET364040	14-TR9	ET397160J	7-TR805	ET725820J	12-Q1	MR407378J1	3-18
ET364040	14-TR19	ET397160J	7-TR806	ET725820J	13-Q1	MT404547J1	3-9
ET364040	14-TR20	ET397160J	7-TR807	ET731437J	12-Q2	MZV1102A090A	4-25
ET364060	15-TR2	ET397160J	7-TR812	ET731437J	12-Q3	MZV1102A100A	4-26
ET364060	15-TR8	ET397160J	7-TR815	EV389476J	6-VR301	MZ387332J	4-28
ET364060	23-TR103	ET397160J	7-TR871	EV389476J	6-VR303	MZ387333J1	4-30
ET364065	10-TR129	ET397160J	7-TR872	EV389476J	6-VR304	MZ387335J	3-40
ET366168	6-TR70	ET397160J	7-TR881	EV389476J	7-VR770	MZ387430J	4-21
ET366168	6-TR200	ET397160J	7-TR882	EV389477J	6-VR200	MZ387445J	4-22
ET370310	6-TR7	ET397160J	7-TR884	EV389477J	22-VR5	MZ395471J3	3-27
ET370310	7-TR714	ET397160J	8-TR3	EV389478J	6-VR305	MZ404538J	4-29
ET370310	21-TR5	ET397160J	8-TR4	EV389478J	6-VR306	MZ404542J	4-23
ET370310	21-TR8	ET397160J	8-TR5	EV389478J	7-VR603	MZ404577J	4-7
ET370310	21-TR11	ET397160J	8-TR6	EV389478J	7-VR604	MZ404995J1	3-62
ET370819	12-Q6	ET397160J	9-TR101	EV389479J	22-VR2	MZ406134J	3-58
ET370819	13-Q6	ET397160J	9-TR102	EV389479J	22-VR6	MZ407375J1	3-17
ET373025	20-TR9	ET397160J	9-TR105	EV389479J	22-VR7	MZ409537J	4-32
ET373391	19-TR4	ET397160J	10-TR101	EV389480J	6-VR201	SA395476J	25-4
ET373391	19-TR6	ET397160J	10-TR102	EV389480J	7-VR602	SC407627J1	27-19
ET373985	6-TR408	ET397160J	10-TR103	EV389482J	7-VR601	SE395554J1	3-57
ET373985	6-TR409	ET397160J	10-TR104	EV389489J	7-VR600	SE407612J	27-3
ET373985	6-TR410	ET397160J	10-TR105	EV396023J	22-VR1	SE407625J	27-14
ET373985	10-TR128	ET397160J	10-TR106	EV396024J	22-VR4	SE409419J	25-11-A
ET373985	10-TR131	ET397160J	10-TR110	EV397066J	6-VR300	SE418101J	25-11-B
ET373985	10-TR136	ET397160J	10-TR111	EV397066J	6-VR302	SK395423J	25-20
ET373985	21-TR9	ET397160J	10-TR120	EV397066J	6-VR401	SK407708J	27-21
ET382952J	6-TR6	ET397160J	10-TR121	EV397570J	22-VR3	SK407713J	27-20
ET388338J	6-TR10	ET397160J	10-TR126	EV401032J	18-VR3	SK409478J	25-21-A
ET388338J	6-TR18	ET397160J	10-TR127	EV403919J	14-VR2	SK409479J	25-23-A
ET388338J	6-TR405	ET397160J	10-TR139	EV403988J	14-VR1	SK417935J	25-21-B
ET388338J	7-TR817	ET397160J	14-TR3	EV732502J	13-VR3	SK417937J	25-23-B
ET388338J	23-TR2	ET397160J	14-TR4	EV733235J	12-VR1	SP404383J1	8-1
ET388338J	23-TR105	ET397160J	14-TR5	EV733235J	12-VR2	SP404384J1	11-1
ET390009J	4-19	ET397160J	14-TR6	EV733235J	13-VR1	SP407634J2	27-24-B
ET394881J	6-TR20	ET397160J	14-TR7	EW348414	26-1	SP407635J2	27-24-A
ET394881J	10-TR135	ET397160J	14-TR14	EW389313J	4-20	SP409433J	25-15-A
ET396488J	14-TR22	ET397160J	14-TR15	EW389317J	14-WP1	SP409456J4	25-18-A
ET397160J	6-TR2	ET397160J	14-TR201	EW404002M	25-9-B	SP409486J	25-1

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
SP417931J	25-15-B	ZW332843	3-30				
SP417933J1	25-18-B	ZW336603	3-65				
SZ387263J4	3-24	ZW387492J	4-8				
SZ395478J	25-29	ZW389814J	3-8				
SZ408435J	25-24	ZW389923J	4-6				
SZ408435J	27-23	ZW401776J	3-34				
SZ408436J	25-22	ZW409602J	3-19				
SZ408436J	27-22						
SZ409014J	25-14						
SZ409329J	2-4						
SZ409420J	25-13						
SZ409447J1	25-16						
SZ409480J	25-25						
VT387394J1	3-37						
VT401282J	2-13						
ZG387282J	3-33						
ZG387320J	3-3						
ZG387323J	3-5						
ZG387348J1	3-49						
ZG387403J	4-5						
ZG387413J1	4-27						
ZG387417J	3-44						
ZG387418J	3-45						
ZG387420J1	3-55						
ZG387421J	3-50						
ZG387438J1	3-11						
ZG387443J	4-34						
ZG387468J	4-4						
ZG387502J	4-38						
ZG388290J1	3-52						
ZG392294J	3-61						
ZG392831J1	3-46						
ZG395386J	25-12						
ZG395470J	3-26						
ZG395567J	3-42						
ZG404846J	3-29						
ZG407614J1	27-16						
ZG407615J1	27-17						
ZG407616J	28-1						
ZG407617J	28-2						
ZS321194	3-63						
ZS321298	2-3						
ZS321298	3-15						
ZS336614	27-12						
ZS336714	2-12						
ZS336714	3-22						
ZS357946	25-30						
ZS358936	2-5						
ZS358936	3-59						
ZS358936	4-41						
ZS358936	25-6						
ZS361507	25-3						
ZS362378	25-5						
ZS365149	4-10						
ZS365702	25-2						
ZS373962	25-8						
ZS374389	27-10						
ZS374458	3-38						
ZS379350	2-11						
ZS389950J	4-40						
ZS404844J	3-14						
ZS409216J	2-14						
ZS409216J	3-16						
ZS409324J	27-18						
ZS409503J	25-19						
ZS410851J	3-12						
ZS425981	4-36						
ZS464703	3-28						
ZS467796	2-9						
ZS563444	2-7						

Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.	Part No.	Ref. No.
ET354414	14-TR1	ET397160J	6-TR5	ET397160J	17-TR1	EW404366J	15-WP1
ET354414	14-TR10	ET397160J	6-TR13	ET397160J	21-TR1	EW404367J	15-WP3
ET354414	14-TR103	ET397160J	6-TR14	ET397160J	21-TR3	EW409012J	25-17
ET354414	15-TR1	ET397160J	6-TR23	ET397160J	23-TR1	EW414845E1	25-9-A
ET354414	23-TR3	ET397160J	6-TR24	ET397160J	23-TR102	EX405691J	14-TH1
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ET354415	7-TR602	ET397160J	6-TR201	ET397160J	23-TR154	HR405340J	3-13
ET354415	7-TR608	ET397160J	6-TR202	ET397160J	23-TR155	MA387474J3	2-6
ET354415	7-TR713	ET397160J	6-TR203	ET397160J	23-TR201	MB407117J	4-11
ET354415	7-TR801	ET397160J	6-TR209	ET397160J	23-TR202	MB407622J1	27-5
ET354415	9-TR103	ET397160J	6-TR211	ET397160J	23-TR203	MB412384J	27-4
ET354415	23-TR101	ET397160J	6-TR212	ET397160J	23-TR251	MI404552J1	3-10
ET356224	7-TR791	ET397160J	6-TR300	ET403420J	4-14	ML387277J4	3-32
ET356236	6-TR4	ET397160J	6-TR302	ET404498J	19-TR3	ML387311J2	4-42
ET356336	6-TR104	ET397160J	6-TR303	ET404498J	19-TR5	ML387316J	3-1
ET356336	6-TR210	ET397160J	6-TR403	ET405622J	6-TR11	ML387318J	3-2
ET356336	6-TR306	ET397160J	6-TR503	ET408826J	15-TR3	ML387344J	3-54
ET356336	6-TR501	ET397160J	6-TR506	ET408826J	15-TR4	ML387345J	3-51
ET356336	6-TR502	ET397160J	7-TR604	ET408826J	15-TR5	ML387346J1	3-53
ET356336	7-TR811	ET397160J	7-TR610	ET408826J	15-TR6	ML387349J2	3-56
ET360399	6-TR205	ET397160J	7-TR611	ET408826J	15-TR7	ML387350J1	3-47
ET360399	6-TR304	ET397160J	7-TR701	ET408827J	16-TR2	ML387402J1	4-3
ET360399	6-TR305	ET397160J	7-TR702	ET408827J	16-TR4	ML387428J	3-39
ET360399	14-TR11	ET397160J	7-TR703	ET408841J	19-TR1	ML387431J1	3-31
ET360399	14-TR18	ET397160J	7-TR704	ET408842J	19-TR2	ML390768J4	3-25
ET360399	14-TR21	ET397160J	7-TR706	ET408842J	19-TR7	ML391745J3	3-41
ET360399	21-TR6	ET397160J	7-TR707	ET408842J	20-TR8	ML404567J1	4-1
ET360399	21-TR7	ET397160J	7-TR708	ET408842J	20-TR10	ML404944J	4-2
ET361490	4-24	ET397160J	7-TR709	ET408988J	15-PH1	ML407119J	3-4
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ET364040	6-TR208	ET397160J	7-TR803	ET414816J	6-TR9	MR387406J	4-35
ET364040	7-TR617	ET397160J	7-TR804	ET713614	13-Q5	MR391968J	4-33
ET364040	14-TR9	ET397160J	7-TR805	ET725820J	12-Q1	MR407378J1	3-18
ET364040	14-TR19	ET397160J	7-TR806	ET725820J	13-Q1	MT404547J1	3-9
ET364040	14-TR20	ET397160J	7-TR807	ET731437J	12-Q2	MZV1102A090A	4-25
ET364060	15-TR2	ET397160J	7-TR812	ET731437J	12-Q3	MZV1102A100A	4-26
ET364060	15-TR8	ET397160J	7-TR815	EV389476J	6-VR301	MZ387332J	4-28
ET364060	23-TR103	ET397160J	7-TR871	EV389476J	6-VR303	MZ387333J1	4-30
ET364065	10-TR129	ET397160J	7-TR872	EV389476J	6-VR304	MZ387335J	3-40
ET366168	6-TR70	ET397160J	7-TR881	EV389476J	7-VR770	MZ387430J	4-21
ET366168	6-TR200	ET397160J	7-TR882	EV389477J	6-VR200	MZ387445J	4-22
ET370310	6-TR7	ET397160J	7-TR884	EV389477J	22-VR5	MZ395471J3	3-27
ET370310	7-TR714	ET397160J	8-TR3	EV389478J	6-VR305	MZ404538J	4-29
ET370310	21-TR5	ET397160J	8-TR4	EV389478J	6-VR306	MZ404542J	4-23
ET370310	21-TR8	ET397160J	8-TR5	EV389478J	7-VR603	MZ404577J	4-7
ET370310	21-TR11	ET397160J	8-TR6	EV389478J	7-VR604	MZ404995J1	3-62
ET370819	12-Q6	ET397160J	9-TR101	EV389479J	22-VR2	MZ406134J	3-58
ET370819	13-Q6	ET397160J	9-TR102	EV389479J	22-VR6	MZ407375J1	3-17
ET373025	20-TR9	ET397160J	9-TR105	EV389479J	22-VR7	MZ409537J	4-32
ET373391	19-TR4	ET397160J	10-TR101	EV389480J	6-VR201	SA395476J	25-4
ET373391	19-TR6	ET397160J	10-TR102	EV389480J	7-VR602	SC407627J1	27-19
ET373985	6-TR408	ET397160J	10-TR103	EV389482J	7-VR601	SE395554J1	3-57
ET373985	6-TR409	ET397160J	10-TR104	EV389489J	7-VR600	SE407612J	27-3
ET373985	6-TR410	ET397160J	10-TR105	EV396023J	22-VR1	SE407625J	27-14
ET373985	10-TR128	ET397160J	10-TR106	EV396024J	22-VR4	SE409419J	25-11-A
ET373985	10-TR131	ET397160J	10-TR110	EV397066J	6-VR300	SE418101J	25-11-B
ET373985	10-TR136	ET397160J	10-TR111	EV397066J	6-VR302	SK395423J	25-20
ET373985	21-TR9	ET397160J	10-TR120	EV397066J	6-VR401	SK407708J	27-21
ET382952J	6-TR6	ET397160J	10-TR121	EV397570J	22-VR3	SK407713J	27-20
ET388338J	6-TR10	ET397160J	10-TR126	EV401032J	18-VR3	SK409478J	25-21-A
ET388338J	6-TR18	ET397160J	10-TR127	EV403919J	14-VR2	SK409479J	25-23-A
ET388338J	6-TR405	ET397160J	10-TR139	EV403988J	14-VR1	SK417935J	25-21-B
ET388338J	7-TR817	ET397160J	14-TR3	EV732502J	13-VR3	SK417937J	25-23-B
ET388338J	23-TR2	ET397160J	14-TR4	EV733235J	12-VR1	SP404383J1	8-1
ET388338J	23-TR105	ET397160J	14-TR5	EV733235J	12-VR2	SP404384J1	11-1
ET390009J	4-19	ET397160J	14-TR6	EV733235J	13-VR1	SP407634J2	27-24-B
ET394881J	6-TR20	ET397160J	14-TR7	EW348414	26-1	SP407635J2	27-24-A
ET394881J	10-TR135	ET397160J	14-TR14	EW389313J	4-20	SP409433J	25-15-A
ET396488J	14-TR22	ET397160J	14-TR15	EW389317J	14-WP1	SP409456J4	25-18-A
ET397160J	6-TR2	ET397160J	14-TR201	EW404002M	25-9-B	SP409486J	25-1

Part No.	Ref. No.
SP417931J	25-15-B
SP417933J1	25-18-B
SZ387263J4	3-24
SZ395478J	25-29
SZ408435J	25-24
SZ408435J	27-23
SZ408436J	25-22
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SZ409014J	25-14
SZ409329J	2-4
SZ409420J	25-13
SZ409447J1	25-16
SZ409480J	25-25
VT387394J1	3-37
VT401282J	2-13
ZG387282J	3-33
ZG387320J	3-3
ZG387323J	3-5
ZG387348J1	3-49
ZG387403J	4-5
ZG387413J1	4-27
ZG387417J	3-44
ZG387418J	3-45
ZG387420J1	3-55
ZG387421J	3-50
ZG387438J1	3-11
ZG387443J	4-34
ZG387468J	4-4
ZG387502J	4-38
ZG388290J1	3-52
ZG392294J	3-61
ZG392831J1	3-46
ZG395386J	25-12
ZG395470J	3-26
ZG395567J	3-42
ZG404846J	3-29
ZG407614J1	27-16
ZG407615J1	27-17
ZG407616J	28-1
ZG407617J	28-2
ZS321194	3-63
ZS321298	2-3
ZS321298	3-15
ZS336614	27-12
ZS336714	2-12
ZS336714	3-22
ZS357946	25-30
ZS358936	2-5
ZS358936	3-59
ZS358936	4-41
ZS358936	25-6
ZS361507	25-3
ZS362378	25-5
ZS365149	4-10
ZS365702	25-2
ZS373962	25-8
ZS374389	27-10
ZS374458	3-38
ZS379350	2-11
ZS389950J	4-40
ZS404844J	3-14
ZS409216J	2-14
ZS409216J	3-16
ZS409324J	27-18
ZS409503J	25-19
ZS410851J	3-12
ZS425981	4-36
ZS464703	3-28
ZS467796	2-9
ZS563444	2-7
ZW332843	3-30
ZW336603	3-65
ZW387492J	4-8
ZW389814J	3-8
ZW389923J	4-6
ZW401776J	3-34
ZW409602J	3-19

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Beiblatt für
Akai Service Manual VS-F 1000 EOG-2VD
(VS-F 1000 MK 2)

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